

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 93/01294

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see PCT/ISA/206 mailed on 12.08.93

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-11, 15-23(part.)

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 93/01294

I. CLASSIFICATION OF SUBJECT MATTER (If several classification symbols apply, indicate all)⁶

According to International Patent Classification (IPC) or to both National Classification and IPC

Int.C1.5 C 12 N 15/11 C 12 Q 1/68

II. FIELDS SEARCHED

Minimum Documentation Searched⁷

Classification System

Classification Symbols

Int.C1.5

C 07 K

C 12 N

C 12 Q

Documentation Searched other than Minimum Documentation
to the extent that such Documents are included in the Fields Searched⁸

III. DOCUMENTS CONSIDERED TO BE RELEVANT⁹

Category ¹⁰	Citation of Document, ¹¹ with indication, where appropriate, of the relevant passages ¹²	Relevant to Claim No. ¹³
X	SCIENCE vol. 252, 21 June 1991, WASHINGTON, DC, USA pages 1651 - 1656 M.D. ADAMS ET AL. 'Complementary DNA Sequencing: Expressed Sequence Tags and Human genome Projects' see the whole document ---	1-11,15 -23
P,X	NATURE vol. 355, 13 February 1992, LONDON, UNITED KINGDOM pages 632 - 634 M.D. ADAMS 'Sequence Identification of 2375 human brain genes' -----	1-11,15 -23

¹⁰ Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "A" document member of the same patent family

IV. CERTIFICATION

Date of the Actual Completion of the International Search

07-07-1993

Date of Mailing of this International Search Report

22. 10. 93

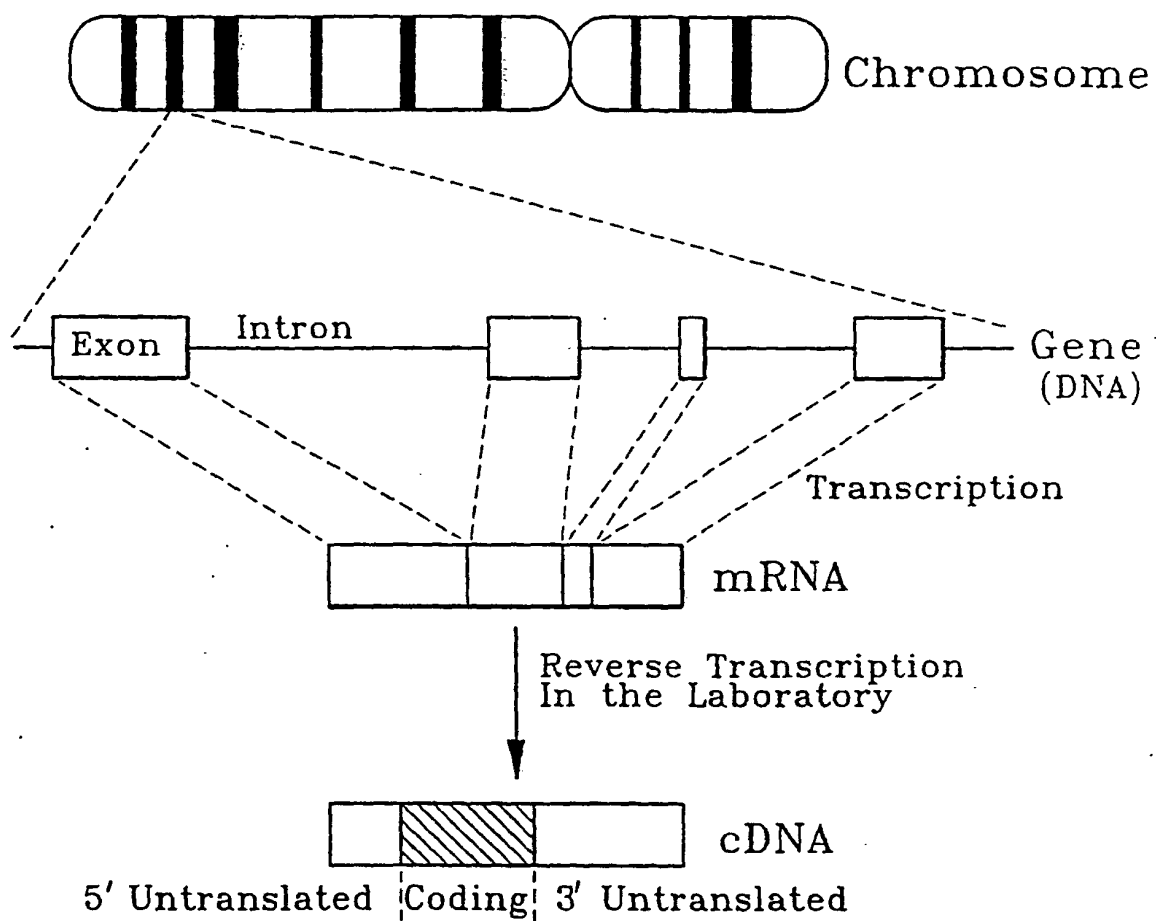
International Searching Authority

EUROPEAN PATENT OFFICE

Signature of Authorized Officer

VAN PUTTEN A.J.

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**FIG. 1****SUBSTITUTE SHEET**

21. A panel of at least 100 isolated polynucleotides having the sequences of Claim 3 or Claim 16.

22. An antisense oligonucleotide capable of blocking expression of any one of the polynucleotide-encoding sequences of Claim 10.

23. A triple helix probe capable of blocking expression of any one of the polynucleotide-encoding sequences of Claim 10 having at least a 10-base homopurine or homopyrimidine sequence, said probe comprising single-stranded DNA having at least a 10-base homopurine or homopyrimidine sequence and being adapted to bind to the major groove of double stranded DNA which includes said polynucleotide-encoding sequence.

25. The polynucleotide of Claim 1, wherein said SEQ ID NO is 913.

26. The polynucleotide of Claim 1, wherein said SEQ ID NO is 1039.

27. The polynucleotide of Claim 1, wherein said SEQ ID NO is 1395.

28. The polynucleotide of Claim 1, wherein said SEQ ID NO is 1567.

29. The polynucleotide of Claim 1, wherein said SEQ ID NO is 1667.

30. The polynucleotide of Claim 1, wherein said SEQ ID NO is 1704.

31. The polynucleotide of Claim 1, wherein said SEQ ID NO is 2089.

32. The polynucleotide of Claim 1, wherein said SEQ ID NO is 2297.

33. The polynucleotide of Claim 1, wherein said SEQ ID NO is 2302.

8. The polynucleotide of Claim 4, wherein said SEQ ID NO is identified in Table 10 in a structural functional grouping and is one of SEQ ID NOS: 316-2421.

5 9. The polynucleotide of Claim 4, wherein said SEQ ID NO is identified in Table 11 in a developmental control grouping and is one of SEQ ID NOS: 316-2421.

10. An isolated polynucleotide coding for a human protein or polypeptide, which includes a coding region corresponding to the EST identified as:

10 SEQ ID NO: 316 - 2421;
or a polynucleotide complementary thereto.

11. The polynucleotide of Claim 10, wherein the SEQ ID NO is 316-1000.

12. The polynucleotide of Claim 10, wherein the SEQ ID NO
15 is 1001-1500.

13. The polynucleotide of Claim 10, wherein the SEQ ID NO is 1501-2000.

14. The polynucleotide of Claim 10, wherein the SEQ ID NO is 2001-2421.

20 15. The polynucleotide of Claim 10, wherein said polynucleotide further includes the entire sequence designated as any one of SEQ ID NOS: 316-2421.

16. An isolated polynucleotide comprising at least 150 bp of a sequence of Claim 10 and wherein said SEQ ID NO excludes NOS
25 485, 650, 1834, 2073, 2092, and 2353.

17. An isolated polynucleotide sequence, which hybridizes to a sequence designated as any one of SEQ ID NOS 316-2421, except SEQ ID NOS 485, 650, 1834, 2073, 2092, and 2353, or to a sequence complementary thereto, under hybridization conditions
30 sufficiently stringent to require at least 97% base pairing.

18. A polynucleotide according to any one of Claims 4-17, in substantially purified form.

19. A construct in isolated form comprising a vector and a polynucleotide according to any one of Claims 1-17.

35 20. The construct according to Claim 19, further comprising a promoter operably linked to said polynucleotide.

5 WHAT IS CLAIMED IS:

1. A purified polynucleotide having a sequence designated as one of:

SEQ ID NO: 316 - 2421, except SEQ ID NOS 650, 1834, and 2073;

10 or having a sequence complementary thereto.

2. A purified polynucleotide having a sequence designated as one of:

SEQ ID NO: 316 - 2421, except SEQ ID NOS: 485, 650, 1834, 2073, 2092, and 2353;

15 or complementary sequence thereto or, for those sequences over 150 nucleotides long, a portion thereof at least 150 nucleotides in length.

3. An isolated polynucleotide that includes a sequence designated as one of:

20 SEQ ID NO: 316 - 2421, except SEQ ID NOS: 485, 650, 1834, 2073, 2092, and 2353;

or complementary sequence thereto or, for those sequences over 150 nucleotides long, a portion thereof at least 150 nucleotides in length.

25 4. An isolated polynucleotide operably coding for a native human polypeptide or protein, which includes a region coding for the same amino acid sequence as a native human coding region corresponding to a sequence designated as one of:

SEQ ID NO: 316 - 2421.

30 5. The polynucleotide of Claim 4, wherein said SEQ ID NO is listed in Table 6 and is one of SEQ ID NOS: 316-2421.

6. The polynucleotide of Claim 4, wherein said SEQ ID NO is listed in Table 7 and is one of SEQ ID NOS: 316-2421.

35 7. The polynucleotide of Claim 4, wherein said SEQ ID NO is identified in Table 10 in a metabolic functional grouping and is one of SEQ ID NOS: 316-2421.

495

GCTTTCTTCC TACCCCATTC CCGGCTTCCC TCCTCTCCC CTGCAGCCTG GTTAGGTGGA TACCTGCCCT GACGTGTGAG
GCAAGNTAAG GCCTGGAGGG TCAGATGGGG AGACCAGGTC CCAAGGGAGC AAGACCTGCG GANGCARGCA AGCCCCNGCC
CTTCCCCCGT TTTGAACATG TGTAACCGAC AGTCTGCCTG GGCCACAGCC CTCTCACCTT GGTACTGCGT GGACGNTATG
CTAGCTGCCC CTTTCCCGIN CTGGGCACCC CGAGINTCCC CCGACCCCGG GTCCCAGGTA TGCTCCACC TCCACCTGCC
CCACTCACCA CCTCTGNTAG TNCAGACAC CTNCAOGYCC ACCTGGTCCT CTNCCATGCG CCACAAAAGG GGGGGCAGCA
GGGACGAGCT TAGCTGAGCT GGGAGGAGCA GGGTGAGGGT GGGOGACCCA GGATTCCCCC TCCCCCTCCC AAATAAAGAT
GAGGGTACTA AAGTGTGCTT GGTPTTTATT TTATTATTAT TTTTTCCTT TTCCAGTATA CTAGCTGTG TTTTAAGAAA
GGGGATATTA AAAAAAAAAA AAAGACAAA GIGTTTTTAA AAAAAAGCAA CACCCACACC TGGTGTCTGT ATATAGTCAG
CTTATCTCGT GTTCAATCGT CTGATCTCTA CAGAGAGAAG TGGAAAATGC TGTATCAAGG GTGGGCTTAG CTGTGCCTTT
CCAATAAAGA TG

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GCTGTACTAT ATGAAGCCTG CATATACTGT GAGCTGTGAT TGGGGAACAC CAATGCAGAG GTAACCTCTCA GGCAGCTAAG
 CAGCACCTCA AGAAAACATG TTAAATTAAT GCTTCINITC TTACAGTAGT TCAAATACAA AACTGAAATG AAATCCCATT
 GGATTGTACT TCININCTGA AAAGTGTGCT TTTTGACCTT ACTGGACATT TATTGACTTA ATTGCTTCTG TTTATTAAAA
 TTGACCTGCA AAGTTAAAAA AAAATTAAAG TTGAGAACAG GTATAAGTGC AACTGAATA GTCTAATCTA CATGTAACAC
 ATATTNNGT ATGATTTTCT ATACTCTAAT CAGCACT

SEQ ID NO:2420: (Length of Sequence = 1843 Nucleotides)

GAAGCTCCGG CCCAGGTGGC CGCTGGCTGC TGAGCTCAG CCAAGGTGCG GCTGTGGTGG TGGTGGTGGC GGCTGCAGGC
 TTTGCTGCTG CTGGATGTTT GCTGGCTGCA GGTTCGTCTG CTGCATCTGT AAGTTTGTG GCTGCACCTG CTGGGTCTGC
 ACCAGGTGAG GCTGGGTGGC CAGCCGGGTG CTGGGCAGGC CCTGGTAGCT CATCATCTGG GACAGGGCGC TGGCAGCAAG
 GCTACTGTGC AGCGGGCCTA CCATGCCATG CTGCAGGGAG GGGGCCCTGTG TGCTCAGGGG GCCTGGTGCC ACACTCCCC
 GCAGAGGGTT GTATTGGTTC GGCACCATGC CGCTCTGCAG CCGGGACAGC CACTCGCATT GACCATTCAA ACTGGTGGAC
 CCGNCCACAG TGAAATTCAG GGCCCTCCG CTGCTNGAGC CCAGGACGGT GCTGGTGCCA GAGGCCACAG GCAGGTGGGA
 GAGACGAGGT GGGCCAGTNT TAAAGGCCAG CCGGCCGCC CCACCCANCG CCGCCATYTC GGGCTTGGCC GCCACGTTCA
 GGTNCCCNAT GCCCAGGTGG GTGTGGGGCA TYCCAGGCAG GTGGTTGAGG GGCACGGACG GAGACTGCTG GAACGGGGAG
 GGCAGNAGTG GCGGCGAGGC CACGTCGAC AGGTAGCCAT GGGGTGACTC CAGGGAGTCC ACGGGCGAGA GCATGCCGGA
 GCTGTCCAGC AGGCAGNCCT TGCCTGCTG GGACTTCTTC CTCGTGCTT TGAGGTCTCT GGCTCTCTTG CTTCACAGG
 CCAGGCCCTT GCTGCTGGGC TTGCGGACCT TCTTGCCCTG CACGCCGGGC TTGAGGCTGC CCAGGTAGCC GTTGGGCGAG
 CAGAGCGNGG GCGACAGGGT GGGCGTGCCC CCGAGCGGGC TCCGTGCAGC TGCGGGCTGC GCACCAGGTT GTACTGCTCC
 AGCAGCCTCA CGATGTGTG ATGCATGCNC TCCNTGCGA TGTGCGCGCG CAGGCGGTCC ATATGATCCG TGATGTCCCG
 GTTGGCAAAG TGGTCCAGCA GCACCTTGGC GGTCTCGTAG CTGCCCTCCC GGGCGGCCAG AAACAGGGGT GTCTCTCTCC
 TGTGTGTTCT CATATCTTTG TTAGCCCCGT TCTTCAGGAG CACAACGCG GCATCCACAT TGTTCACNGC GGCGGCCAG
 TGCAGGGCGG ACTTGCCAG GTNATCTACG GCGTTCAGT CCGCGTGTGA GTTGATGAGG TCCTCCAGCA TGCCCTCCAC
 GGCCAGGGCG GCAGCCAGGN TCAGTGGCGT CGTGCCATCA TGCATGCGGG CATCCAGGTC TGTGGCTCGG TTCGGATCA
 GGATCTTGGA AGACACCTTG TGGTCCGCA GACACAGCG CATGCAGCG GGTGCGGCC ATGTTGTCTT GGATGTTGGC
 ATCTGCGCTG GCCTCCAGCA GCGGCTTGGC GGCATCAGAG CGTGAGTAGC GGGCGGCCAG GTGCAAGCG GTCTCGCCCG
 TNCGGTCTGT CTGGTTGTGC AAGCTGGCGC OCTGGTAGAT GAAGTCGGAG ATGACGGCG GCGGCTCTC CTCTCTCTCG
 CTGTTGCCCG TCTCCAGGCC GCGCCCGCTG CAGGAGGCGA TCATGAGCG GGTGAAGCCA TCAGGCCCGC GCACATTGAC
 GTCCATGCAG TGGCGTCAA CCTCACCTG GGGCGGTGTG GGGGCCATGG CANACATCG CAGGTACCG GCATCCAGGT
 GCTGCTGAGT CCACTGCCCG TGGTCTGTCT GGTCTGTCAG GTCAGGCAGA ACCACGGGCT CCTCGAACC GAACTTCTTG
 GTC

SEQ ID NO:2421: (Length of Sequence = 1452 Nucleotides)

CCAGCAACTC AAATTCACCA CCTGGGACTC CTGCGACCGC ATCAAAGACG AATTTTCAGT ACTGCAAGNT CAGTACCACA
 GCCTCAAGCT CGANTGTGAC AAGTTGGCCA GTGAGAAGTC AGAGATGCAG CGTCACTATG TGATGTACTA CGAGATGTCC
 TACGGCTTGA ACATCGAGAT GCACAAACAG GCTGAGATCG TCAAAGGCT GAACGGGATT TGTGCCCAGG TCCTGCCCTA
 CCTNTCCCAA GAGCACCAGC AGCAGGTCTT GGGAGCCATT GAGAGGGCCA AGCAGGTAC CGCTCCCGAG CTGAACTCTA
 TCATCCGACA GCAGCTCCAA GCCACCAGC TGTCCAGCT GCAGGCCCTG GCCTGCCCCT TGACCCCACT ACCCGTGGGG
 CTGCAGCCGC CTTCGCTGCC GCGGTCAGC GCAGGCACCG GNCTCTCTC GCTGTCCGCG CTGGGTTCC CAGGCCACCC
 TCTCCAAGGA AGACAAGAAC GGGCACGATG GTGACACCCA CCAGGAGGAT GATGGCGAGA AGTCGGATTA GCAGGGGGCC
 GGGACGGGGA GGTGGGAGG GGGACAGAG GGGAGACAGA GGCACGGAGA GAAAGGAATG TTAGCACAA GACACAGCGG
 ANTCTGGGAT TGGCTAAACT CCCATAGTAT TTATNGTGGC CGCCGGCGGG GGCCCCAGCC CAGCTTGCAG GCCACCTCTA

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ATGTAATACA GTGTAGAAAG CGATCATGTC ATAAGCAATG ATTCTGTACA ATCATNCNGC AGAAAATTAG TTTTGGAGAA
 TTCTTGGTAA TTGAAGACCA GCAGAGCACC CCTCCCCACC CGCCCCCTAA AAGTGCTTAC AATTTACAGG GATYCTTTTC
 TTTTTCAAAG ACCCAAAGAY ACGTGGTCAG AAAAMAAAAG CTTGAAGTCT CAATGCCTAA TGTCGTGCAC ATTKNACAGG
 GACGC

SEQ ID NO:2417: (Length of Sequence = 384 Nucleotides)

GGTTTTGCAA GATGATGGAA CATOCCATAA GOCAGGTGT GCAGCTAACC TTTAGAAGCT GGAAAAGGCA AGGAAACATA
 TTCTGTAGAG CCTCCAGAAG GAACACACGT CTGCACACAC TTTGTTTTTA GCTCAGTGAA ACTGATTTTG GACTACTGAC
 CTTCAGAACT GTAAGATAAA TTCTGTGTGT TTTACGTTTG TGGTGTATA GAAGTACAG AAATGAATAT ACTTACCGTA
 GTTTAGAGAG AGATGGGAGG ATACTTTTTT TTCTOCCFTC TTTTGAAGG GAGGTAGGTC TCCTTAACTC CAGAGGAAAG
 ACTTGCTTT CTTCATATAG GGGCCCTTTG ATTCTTAATT CATGGGAGTT GTTTAGGAGA TTGA

SEQ ID NO:2418: (Length of Sequence = 1645 Nucleotides)

GTGATGGCTG CTTGAGGGG GACCATCATG TOGGAGACCG CATTGGTGCA GGTCTCACC CACAGCCCAT GCCCAGCCTC
 CTGCAGACTC AGGTCATCCA GCTGGTOGAT GGCTCTTTGC ATACCTGGTG CCTCTCCTC TGGGGCTTGG CAGGCTTCTC
 TGGGGGCTTC TCAGATGACT CTTTGCCTT CTTCTCTGTC TTGGCTAACT CCTTGGCCAG CTCTGAACGT GCCTCCTTGG
 CTCCCTCTTC TACCACCTCC TCCCGTTTGG CCAACTTGCT CACGGCOGTC TTGGTAGTGG CTTTGAAGGCT CTCCTTGCTA
 TCAGCCCGCT GTTTGATTTT GCTGGGCTTG AGGTTGGTAG GCACAGCCCC AGAAGCCAGG NCTTCTGCG TGGCCACAGG
 GTAACGCAGG AAGTCCAGAT GCGAAGCTT TTCTAGGCCC TCCAAGATCT TGTMTTGGGG AGCATTTCCT GGAAAAGCA
 CACGCACAAT CTTCTCAGTG GGATTGGCTG GTAGCCAGAC CACCAGAGCA GTGATAGAGG TAAGGTAGGG CACGGAGATC
 TCAGCCTCCT TCCCATGGG CAGCACGATG CCTGINTTGG CTTTACTATT GCTTGCACC TTTTGCATGA GGAAGTGCAT
 CTCTTGCTG TCCTTGACAG GGTGAGGAC ATACATGTCC AGCCGGCCCA CACCCATTTT GTTGAAGAGG GTCAGTGGCT
 CAATGGTATT GCTGACCACA CGATATAGAG GCTCAGCCTG GATGCCCAGG CGTTTAAAGT GCTGCAGAGT GAGGCAGGCC
 TCCTCAATGC TACGCTTGGC TTTCGGGGAG GCATCAGGAA GCGCAGCTT CTCAGGCACG TTGAAAAGA CAACTCCAAG
 CTCAGGANAG ATAAGGTTCT TCACCCAGTC GCTGTAACTG CTAGAGCCT GGNACTGCTC CTCTCTAGC TCTGCCACTT
 TGGCTGCAG TAGTCCATTG ATGCCTGGCA GGTGTCTGTC CCCAATGTGT GTNAGTAGCA CCGAGTCAAT GCGGTCCAAG
 TNCCGTACCA GCTTCCAAA ACAGGACTTG CGATCAGAGC CACCATCCAC CAGGATGTTG AAACCATTGA CAGCAAAGAG
 GGCAGAGTCC CCAAGACCAC CTGGGAAGAT GTAGCAACAA GGCTTGGAGA GCTTGAGGAA GCCCCCTGAG GTGGGGGGCT
 CTAGTAGGTC AAATGGGGAT GGCACGTCCA CAGTCTCAGA GACATACTCG GAGAACTCAG CCACGCCGTC CATGGTGGGC
 AGAGTGGGCT CAGGGTTTAG CCGGAGGTGC AGGGTCTCTT GGGAACTGGA TAATCCCAGG TGGCTCCAAT CACCTTCCCC
 TAAGCAGGAC ACGGTAAAGGA AGGCCTGTAT CCCAGGGTCT CTATGTCTGA GCAATTGGGA AATCTGGGG TTGTGAAGGA
 CCTGGGCAA GTTTTCATAT GAGTAGGTGC CACTCTGTAG GATGAGGTCT CCCCAGGCT CTAAACTTTG CCCACTCAAG
 ATTAGTAGTT TATAAGCTGA TGAGCTGCTA AGAAGATGAT GAACCTCAGA GCTGATGCTG TCTGCACTGG GATTTACCAG
 GATGATGGTC TCTAGGATCT CACTCTGGTG GCAAAGGGTC CTCTG

SEQ ID NO:2419: (Length of Sequence = 837 Nucleotides)

GGAAGGATGA GAAACAGATT TNGCTCACT TCATGGGCTG GCCTGGAATT GACGATGGTG CAAACCCAAA TNATCCTGAT
 GTAATTATG AAGATTATGG AACTGCAGCG AATGACATCG GGGACACCAC GAACAGAAGT AATGAAATCC CTTCCACAGA
 CGTCACTGAT AAAACCGGTC GGAACATCT CTCGGTCTAT GCTGTGGTGG TGATTGCNTC TGTGGTGGGA TTTTCCCTTT
 TGGTAATGCT GTTCTINCTT AAGTTGGCAA GACACTCCAA GTTTGSCATG AAAGGTTTTG TTTTGTTC TAAGATCCCA
 CTGGATGGGT AGCTGAAATA AAGGAAAAGA CAGAGAAAGG GGCTGTGGTG CTTGTGTGTT GATGCTGCCA TGTAAGCTGG
 ACTCCTGGGA CTGCTGTGG CTTATCCCG GAAGTGCTGC TTATCTGGG TTINCTGGTA GATGTGGGCG GTGTTTGGAG

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CCCCAGTTTT TCCTGCAGAT CGGGAGTCGA GCAATGCCTA CCCCCGCTC CGCACCAGT TGGGCGCTCC CGGATGATGC
CCTACCCCTT T

SEQ ID NO:2410: (Length of Sequence = 135 Nucleotides)

CTGCAGGACT TGCGAAGASC GTGCATTCCC AGTGGGCGAA CGGGAATTCG AACGGAGAGA GGGTTATCTT GTGGGGGGCT
ACCCGTGGAG AGCAAGGCGC CCCAGGGGT TGGNTCGGTG AAATINAGGT CGCCC

SEQ ID NO:2411: (Length of Sequence = 330 Nucleotides)

ATGCTGCTCG GTTCTCTGT CCCCCCACT TTACCGCGAA GCCCCAGCT CAGAGTCCCC TCGTTTCTCC TTGGAGGCGC
TGACGGGTCC AGATAAGGAG CTGTGGCTTA TTCAGGCCCC TGCAGACTTT GCCCCAGAAT GCTTCAATGG GCGGCATGTG
CCTCTNTCTG GCTCCCAGAT CGTCAAGGCG AAATTGGCAG GCAAGCGSCA CGCTATCGG AGTCTCAGC AGCTGTCCCC
AAGCTGGAGA AGCGACCCTG CTGGCCCCCT CAANGGAGGC AGGAGGTGGA CTCACCTGTG CCTCAGCCCC CCAGGGCACC
CTAAGGATCC

SEQ ID NO:2412: (Length of Sequence = 583 Nucleotides)

TGCACCGGTG CACCAGGTGC CCGTGTGGAT TGTNACAGNN ACGTGGGTNA TGAAGGTAAC CACCTACCGN GTGCACGTGG
CCNAGCAGCA GGACGTGCAC CTGACTGTNA CGGAGTCTCG GCAGCATGAG CTCTCGCCAG ACTCGAAGCTT GCCCCGTGAG
CTCCTACCA TCCGTGTGGC CAGCACCAAC CCTGCTGTGC AGGCCCTTGA CATCTGGCTG AACTCCACTG AGTACGGGGA
GCTCTGCGAG AAGCTCCGGG CACCCATCCG CAGGGCAGCC CATGTGGTCA TCCACCAGAG CCTGGGCGAC CTNTTNNITG
AGACATTTGC CTCCTGTGTA GAGGTCAACC CGGCCTACTC AGTGCCAGC AGCCAGGAGC TGGAGGCGCTG CATAGGCTTG
CATGCAGACA CGTGCCAACG TGAAGNTGGT GAAGACCTGC CAGGAGTCAG CCACAGGGGA GTTCCAGCAG TTTAATTC
CGCCCCATGT TGGTGGCTTA ACTTGATNGG GAAAGTGGNT TNGNCAAGCG GCAAGACCCC CTTGGGNCIT NAACTTGNT
TGGCAAACGG GGTNCCTGCA TGG

SEQ ID NO:2413: (Length of Sequence = 203 Nucleotides)

TGTCCTCCC ACCCCCTAGC CATGCAGNGG TGAATNGGGG AACCCAGGNN GGGGGCTGAG AAGCTCCAGG CCACCTTNAG
GGAATCCAG AGGGTCTTTC TACCAGGAAG AAGTGCCGCA GCTGCGTGGC CGCCGAGACC ACGCGGGAGG TGATCTGGTG
GGACAAACGT TCCGTCTGCT CCCAGTCTAG GAGATCGAGT CTC

SEQ ID NO:2414: (Length of Sequence = 92 Nucleotides)

AAGGGGCAGG ATGGGGCTGG GAAGTCCAAC CCCACGCATT TGGGCTCAGC CTGGACATG GAGGCTGAC AGCTGTTGTC
CTTTGGGGAT CC

SEQ ID NO:2415: (Length of Sequence = 401 Nucleotides)

CTTTTCCCTT CTGTGNCCTA AATGCANCAT CTINATACAC GTTGCTTAAC CTAGAANCCT GGCTCCACCG TGAATTCTAA
TTGGTCCGTG CTATCGAGGC ACTGTCCCTT TAACTGGTCT CGTCCAGTG GCCCCNACTG CTTTCTCTCC TCTTCCAGNA
ATGGCTCTTC GGGCCAGAG TTGGAATCTC GCGATCGGGA TGGGACGGA GTACCGGCT GGGGTGTCCC AGAGCCCGGA
CTGAGCTGGG GAGTCAAGAC CTCGGGCGAT GAGGGCTGAG CAAGTCGGAG TCGTAGGTCC AGTTCTTCCC CAGCTTCTCC
TGTCTCCAAT CTGTGGGT CTGGGGTTC TCGTCTTCC AGCGGGGTGG AGCTGCTGGT GGAAGAGTCC TCCCCGATC
C

SEQ ID NO:2416: (Length of Sequence = 245 Nucleotides)

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TCATTAAGTT ATACTCTTGG ATAGGAACAC TGAGGAAAAA TGAAAGATGA GATTTCGAAT AGGGATTCTC TAAITCTCAT
GTTAATCTGT TTTGTACCAT TTTACTTTG TCTTTGTGG ATCTCTTCTT TTTATTAGAT GATATTAAAG GGGATTAAAG
TTGTATTGTA TGAAATGTC

SEQ ID NO:2404: (Length of Sequence = 399 Nucleotides)

TTCCCAAAGT GGTGTGAACA TTTTACACTC CTACTAACAG TGCATGGGAA GCCAGTTTCT CTATATCCTC TCCAACATTT
GGTGCTGTCA ATCTTTTAAA ATTTTAGCCA TTTTGTGGT TGTATAGTGT TATCTCATTG CAGTTTTAAT TTGCGATCC
CTGAATGTGT GTAGGTGTGT ATATGTATTA TATAATATAT ATATNATNCT TTCACITATT TTGAAGTAAT TTCAAAGTTT
CCAGAATAAT ATCAAGAACT CCTGTACTCC CTTGCGCAGA TTCTCCAATT GTAATGTTTT ATGTCATATG CTCCATTGCC
CAITCTCCTC TCTACTTATA GCTTGCATTA GTGTTTTCTT GGAACCNITA GAGATGAAGG TGGAAAAAAG GATGCGGGT

SEQ ID NO:2405: (Length of Sequence = 404 Nucleotides)

GGACAGAGT GACCTGACCA CCTAACATC AGCTGCATAC CAGCAGAGCC TGACTGTTC CACAGGAACT CATCTCCTCA
GCATGCAGGG GAGCCCTGGA GGACACAATC GCCCAGGCAC CCTCATGGCA GCTGACAGAG CCAAACAAAT GTTTGGACCC
CAAGTGCTTA CGACCCGGCA CTACGTGGGC TCAGCAGCTG CTTTTGCAGG GACACCAGAG CATGGACAAT TCCAAGGCAG
TCCTGGTGGT GCCATGCGGA CTGCTCAGCC CCCAOCCTCAC TATGGGCCCA CACAGCCAGC TTATAGTCCT AGTCAGCAGC
TCAGAGCTCC TTCGGCATTC CCTGCAGTGC AGTTACCTAT CTTAGCCAC AGCCACAGGC CTATTGCTGT GCATGGGCCA
TTTT

SEQ ID NO:2406: (Length of Sequence = 280 Nucleotides)

AAGAGAGAAC ATTTTATTTG TCTATAATTA GGGTAAACAG TTGGGTAAAA YCTTACTAAA AGAAAGTTAA GGTGTGCTTA
ACACAAGATA TATAATGCA TAAATYAGTT AATTAAATTT YAATTAAAM CAGCTGCTTT GGAAATCCAA CATGTATACT
TCAAAATAAT TTACCTAAAT AACTTATGAA AATGGATGTT ATTGTACAAC TCATCTCTCC TTATAAAAGG NGAACAAAGG
ACATAGGAAA GCTGAAAAGA AGGCTAGATG AAGATACAGG

SEQ ID NO:2407: (Length of Sequence = 350 Nucleotides)

TCCAAGGGCA ATATAAATTA CAGTATGCAA AACATACTGA CTGGCTGAGG TAAAACGCAC TGCTCCTGCC TCACGTCACC
ATGAGGGGAA ACACACATAT GCTTTTAAAA ACATCTGGCT TATAAAAAA CATCCCCTAG AAAGGCCTCC AGAGAGGGGC
TGTGAGGCTC ACCCTCTGCC GCGCTCAGGA GGACCCGCG GCTCAGCCCT GGCCCCCTCA CTGCAGCCAT GGGTGGCGCC
TCCCCCTACT GCCTGCCAG GGCTCTGTCC AGGTTGCTCT TGATGGTGTG GAGGAAGTCC GTGGTGTTC GGAAGTGCTC
GTTGAGCTTC ACATTGCTGA GCGGTGAAT

SEQ ID NO:2408: (Length of Sequence = 239 Nucleotides)

ATNGNTTGG GTGCGNAGA AATGGATGTG CGGAAGAAGA AGAAGAAAAA AAATCAGCAG CTGAAAGANC CAGAGGCAGC
AGGGCCTGTG GGGACAGAGC CCACAGTGA GACACTGGAG CCTCTGNAG TCCTGTNCCC GTCCACCACC AAGAAGAGGA
AGAAGCCCAA AGGGAAAGAA ACCTTCGAGC CAGAAGACAA GACAGTGAAG CAGGAACAGA TTAACACTGA GCCTCTAGA

SEQ ID NO:2409: (Length of Sequence = 331 Nucleotides)

TCTCTCAAG AATTTCAAGC CAATCGACCG TCCTGTCTCT TTAAGGCTTA GGAAGAGCAG TGTGGCTGCC CCTTTAAGGA
GGCGTTGCAA CAAACCATAT TGGACAGAGC ATGGGGGCGA CCCATCGGGA CCCGACGGGC CTCTGACTCC AGCAATACAG
CGAATCAGCG GCTTTGGGA ATACATTTTT CGGAAAAAGA CTCTTCTCTC GGTTTCTGCT TCTGCACAG TTGAAATTTT

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GAATTTTTTTT ATTTAGGTGG ATGCATTTTT NGTCGTGTTA CTGCTCTTCT CAGCTTTATT CAATAAACTT GCATTTTAAG
GGTTGTATG GCAATTTTAA CTAAAAATGT GCATCATGAT GGAAGGTGCA GACCTTTTT

SEQ ID NO:2398: (Length of Sequence = 421 Nucleotides)

GACAGGTTGG TCTTACCCAC TGGNTCCAG TCATGCTGTA AACAGGGCTT GCTTTGGAGT CTGTCAGACC TGGCTTAGAC
CCAGGCTCTG ACCAAATGGG TGAGTTATGC AGCTACTTGG TGGCATCTAA TACCCTATCG CAAAGGACTG CCGTGAACAG
GAAGGAGGTG TCAAATTTGG CAGTGCCTGA TGAGGTGAGG CCAGGACCCA GGAACCTCTA TTCCCTCCCA TGCTCAGGAA
CAGTAAGTGT TCTTCIATCT GCAGAGGTAG ATGCTTAGCA CATCGTGGGT ACTTCACTCA TGATTGCTAA AATTTGAATT
TGTGGATAAA GTCATTTCAA AAGTCAGATT CTAGGACCAA AAATAACAATA TCTGTCCAAC ATGGAAGTGT TAGATCATGG
TTTTTCCTTC CAGCCCCAGG A

SEQ ID NO:2399: (Length of Sequence = 392 Nucleotides)

GATAAGCTTG ATATCGAAAG TNCCACAATG GGTGAGCTGT ACCAGGAACA CCATGAAGAA GACTTCTTTC TCTACATTGC
CTACAGTGAC GAAAGTGTCT ACGGTCTGTN AAGTGTCTGC CCTGAGCTG GAGGGGGGTC TCATTCTACA AAGAGAGAGG
TGGCCCCCTT TTCITGACCT CTTCTCCTT CAAGCTCAAA CACCACCTCC CTTATTCAGG ACCGGCACTT CTTAATGTTT
GTTGCTTTCT CTCCAGCCTC TCTTAGGAGG GGTAAATGGT GAGTTGGCAT CTTGTAACCT TCCTTTCTCC TTTCTTCCCC
TTTCTCTGCC CGNCTTTCCC ATCCTGCTGT AGACTTCTTG ATTGTGAGTC TGTGGTCACA TCCAGTGGAT TG

SEQ ID NO:2400: (Length of Sequence = 366 Nucleotides)

CTGGGGAAGG ACTGGCACA GTTCTGCCIN AAGTGGAGC GCTGCAGCAA GACGCTGACG CCGGGGGGCC ACGCCGAGCA
TGACGGGAAG CCGTCTGACC ACAAGCCGTG CTACGCCACC CTGTTCCGAC CCAAAGGCGT GAACATCGGG GCGCGGGGCT
CCTACATCTA CGAGAAGCCC CTGGNGGAGG GGCCGAGGT CACCGGCCCC ATCGAGGTCC CCGCGGCCCG AGCAGAGGAG
CGGAAGGCGA GCGCCCCCCC GAAGGCCNCA GCAGAGCCTC CAGTGTACC ACTTTACCG GGGAGCCCAA CACGTGCCCG
CGCTGCAGCA AAGAAGGTGT ACTTCGCTTG AGAAGGTGAC GTCTCT

SEQ ID NO:2401: (Length of Sequence = 385 Nucleotides)

CATCCACCA GGGATTAGGG TTCAAGTAGC AGCTGCTAAC CCTTGCACCA GCCCTTGTGG GACTCCCAAC ACAAGACAAA
GCTCAGGATG CTGGTGATGC TAGGAAGATG TCCCTCCCT CACTGCCCA CATTCTCCCA GTGGCTCTAC CAGCCTCACC
CATCAAACCA GTGAATTTCT CAATCTTGCC TCACAGTGAC TGCAGCGCCA AGCGGNCATC CACCAAGCAT CAAGTTGGAG
AAAAGGGAAC CCAAGCAGTA GAGAGCGATA TTGGAGTCTT TTGTTCAATC AAATCTTGA TTTTTTTTTT TCCCTAAGAG
ATTCTCTTTT TAGGGGGAAT GGGAAACGGA CACCTCATAA AGGGTTTCAA AGATCATCAA TTTT

SEQ ID NO:2402: (Length of Sequence = 392 Nucleotides)

AAAGAACITG GTATCTCTAT TAAAGTACAT GANCCTCAA GGAAATAGA GCGATTTACT CTTCTCCAAT CAGTGCATAT
TTACAAGAAG CACAGAGTTC AGTATGAAAT GAGAACACTT TACAGATGTT TAGAGTTAGA ACATCTAACT GGAAGCACAG
CAGATGTCTA CTTGGAATAT ATTCAGCGAA ACTTACCTGA AGGGGTGCCC ATGGAAGTAA CAAAGACACA ATTAGAACAG
TTACCAGAAC ACATCAAGGA GCCAATCTGG GAAACACTAT CAGAAGAAAA AGAAGAAAGC AAGTCATAAA GCCTTCAGGG
AGGCCATTTT TGCCTAAATT TTGAAATGAG GGTGGGCCAG ATGAGTATGT TTAAGTGGAG AGTGCTTTCC AG

SEQ ID NO:2403: (Length of Sequence = 179 Nucleotides)

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TCCATAGGTA TGTGGTAAGC CCAGGGAATC CAGGTAAGCT CAGGTAAGCC CAGGGTAAGC CAGGGAATTG TTAACAGGAA
GCTGGTGGGT TTCTGGCACC TNGACANCGA CTGAATTCTA GGTAGCTTGC C

SEQ ID NO:2391: (Length of Sequence = 200 Nucleotides)

CAGTTCAGCA GGCTATGAAA TTTGTTGGGC ATATAAANAA CTGGAACCTT CAACAGGGTG GTTTTGAAAC TAGNGCATT
ACCAATAAAT GNCAAACCCA CAAGGACAGT GCATTGTGTC ACATAGANGA TCTGGAAAGT ACAGCTGTAA ACTATAATCN
CCAGTCTCTG AGTTAGCACC TTTCCACGNT AGTCTCTTAC

SEQ ID NO:2392: (Length of Sequence = 234 Nucleotides)

TCGCTGAGGT GTTTGGTTTG GAATAGGGAA AAAGGTAAGA GACTAACGTG GAAAGGTGCT AACTCAGAGA CTGGAGATT
TAGTTTACAG CTGTACTTTC CAGATCTTCT ATGTGACACA ATGCACTGTC CTGTGGGGTT TGTCATTTAT TGGTTAATNC
TCTAGTTTCA AAACCACCTT GTTGAAAGTT CCAGNTATTT ATATGCCCAA CAAATTTTAT AGCCTGCTGA ACTG

SEQ ID NO:2393: (Length of Sequence = 337 Nucleotides)

TCCAGAGGCG GATTGAGAAG AAAGGAGATC CACATGAAAT GAAGATCACC TCTGCCTATC TACAGGACAT TGAGAATGCC
TATAAGAAAA CCTTCTCTCC TGAGATGAGT GAAAAATGTG AGGNTTTTACA GTATTCIGCA AGGGAAGCTC AAGATTCAAA
AAAGGTGGTA GAGGACATG AATACCTGAA GTTCGATAAA GGGCCGTGGC TCAAGCAGGA CAATCGCACT TTATACCACC
TGCGATTACT GGTTCAGGAT AAGTTTGAGG TGCTGAATTA CACAAGCATT CCTATCTTTN TNCGGGAAGT CACCATTGGA
GCTCATCAGA CTGACCG

SEQ ID NO:2394: (Length of Sequence = 211 Nucleotides)

CAAATGTTTA TTTTATATAC AAAGAATTAT CATGGTTTTN CATTGAGTAG ATGCCCGGA TAATCCTCTG AAGGAAGAGC
ATTTAGTCCA ACTTAATGAA ACGATATCC TTGCGTACT GACGGAAACA CTGGCGGCAC ATATTGAGGC CATATTTCCG
GATCANACCG TGCCGGTTTG AACAGACACG ACAAGAGCGA GAACCTGCG C

SEQ ID NO:2395: (Length of Sequence = 335 Nucleotides)

CTGAAAGCTG TAACACCTC AGGTAATAAC AAAAGGGATT TTTATTTTAC AGCTAAAGGG AAAATAGGTG GAGAAGTTAA
AAAATAATGT CTGATCCTGT TCCTAAGTTC CAACTATAG CCAACACTCT GATGCTGCTC TTTTCTTGT AGGACCAACC
GTCCAGTTT GCCTGGGACT TTCTCATTTT TACAGAGTCC CAAATCCTAG GAAACTGGAG CAACTGGTAC AACTGGTCAC
CTACTCTTGC CCTCTGGTA AATCAAGNCA ACTGTGACCA TCCAATGTGC CATCTACAG GGNAAAGTTA TAACCCACTA
TTCCCCTATA ACATA

SEQ ID NO:2396: (Length of Sequence = 223 Nucleotides)

AGGGAGATCC AGCTCCGTCC TGCTGCAGC AGCACAACCC TGCACACCCA CCATGGATGT CTTCAAGAAG GGCTTCTCCA
TCGCCAAGGA GGGNGTGGTG GGTGCGGTGG AAAAGACCAA GCAGGGGGTG ACGGAAGCAG CTGAGAAGAC CAAGGAGGGG
GTCATGTATG TGGGATTACA TTTTTTTTTT AAAGAAAGAA TAAATTAATT GTGATTAAAG TTG

SEQ ID NO:2397: (Length of Sequence = 379 Nucleotides)

CCATTACAAA GAATGTGGCA ACTTGCTTNT NCCTAAAAGG AGGAATTGGA ACTAGAATGT GTGACTCTGT GGGGACTGCA
TAGGTTTGT AATGACCTA TAGCTAAACC TTAATGTGTT TGTGTGCTA TACATTGCTT TCCGCATTTT AAGACATCCA
GACGCTATTA CCAACATTTT CCTGTGCAIT AACCTCTGCA TGTGAAACT TTTAACAGTT ACTGAACATAT GTAAATATGT

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CCAGACTTCA TGTGAAGGTG GCTGCTCTG GGGTGATGGT GGCTGGAGAG GCAGACTTTG AGGCTGCCAT GCTCTTATTT
TCAGAT

SEQ ID NO:2384: (Length of Sequence = 165 Nucleotides)

TTAAGACAAT AATGAAAGAT TCTGTACAAA GTTACCAAGT CTACAGGCTG AGCGAGCCAA GGGTAAGTGG GGCTGATCC
TTGTGGACGA ATGTCNCCCG GAGAGCTGGC CTCACCTGGG GGAGGCACGT TGAAAAAGTA CACATTTACA GGGCTCGGGA
AAGGC

SEQ ID NO:2385: (Length of Sequence = 297 Nucleotides)

GGTTTNNATT CATTCTCTTC TATTAACTTC TCTAAAGGAA ATTGGGCACC TGTAATCCCA GCACTTTGGG AGGCTGAGGT
GGGTGGGTCA CTTTNNAGTC AGGAGTTCAA GACCAACCTG GCCAGCATGG TGAAAACCCA TCTCTACTAA AAATACAAA
NTAGCCAGG CTGGTGGTGT TCGCTGTAA TOCCAGCTAC TCAGGAGGCT GAGGCAGGAG AATTGTTTGA ACCTGGGAGG
CGGNGTTGC AGTGAGCTGA GATCGTGCCA CTGCATTCCA GCCCAGGGTG ACAGAGT

SEQ ID NO:2386: (Length of Sequence = 290 Nucleotides)

AAAAAATAAA GTGAATTTAT TGGTTCATGT AACTGGAAAG TCTCATGAAA ATGTCAGCTT CAGGAGAAGC TTGACCCAGC
AGCTTCATGA TGTATGGAAA TACCTGGGTT TTTTGTTCCT NCTCTGCTAC TGTGGTATCA GCTTTATTCC AAGTCTGGCT
TCCTTGTGTG TTGCAAAATG CTTTGTGAGA AGAAGCCTGG GTCCATCTGT TAGGNTTAAG TTTACTCTGT ATGCTGTAGT
AGTGGCTATG ACAAGATTAG GAAGTGTATT TTCTCCTCCC ATATTAAAG

SEQ ID NO:2387: (Length of Sequence = 356 Nucleotides)

GTCATCTGTA TTGTCACATG AAATGCACAT CCAAAACGGG TGACTTGGA ACGACCTATT AGGTCAACG GAGTCCGGCC
CCTGGGGGCA AAGCCTCATC GATGCCACG GGCGGTGGCC AGCACTTTCC TTGGGCTGTG GCGTGTGCAC CCGGCCTCCC
CAGCGGAGAG TCAGCTCACA CCCCAGGCC TTTAGCTCTC TGGCAGCAGC TCCCAAAACG CACTTGAGGA ACCAATAATT
CCTTGGGGGT TAATAGCTGT TCCCAAGAA AAGGGTTCTG TGGGTCAAAT AAGTTTAGGA AAACATGGGT TAAAGAAGGT
TTAGGCAAGA AGCTTTTCTA TAGGGCTTTG TCAGAG

SEQ ID NO:2388: (Length of Sequence = 226 Nucleotides)

ATTATTGGTA TAAAACTTA AGACGGCATT AGAATTCTTA AGAAAAGGTG TAAAATTTAA AAAGATGTGC AAACAACAAA
GAATGCCCGA CCTGAACCA GACCTAAAGC ACCTCCANT TCCTCCACAC ATCATGCCCC AACACCATCC AGCCCAATCG
GACACCAGGA CAGTGAGGA CGGGTGGCTG TTCAGTGGC AACAGATCTG GAAGGAAAGA TTTTCA

SEQ ID NO:2389: (Length of Sequence = 250 Nucleotides)

CCCAGCTAGG CCTTGGNATG GCINCAGTGA GGAGAAATCC CGGGAACGTG ATTGAACAA AGATTCTNAT TGCATTGTGA
TTTTNTATT AAAGTTTGCA TGGTTCTTAA TAAAGGATTC AAACATAAGT TTGTAGTGAA ATGGCCTGGN AGATTCCAAG
GGCTTCTCIN GAAGGGGGAT TNGCTGCAN TGTAGATTIN CCTCTGAAGG AGGCTGGCCC CAACTTGGN CCTCCTCATG
ACCCCTCCT

SEQ ID NO:2390: (Length of Sequence = 371 Nucleotides)

CCTTTTCTG GAGAACGGGG TCTCGCTATA TTGCCAGGC AGGTCTCGAA CTCTGGGCT CAAGCTATCC TCCGCTCT
NAGCCTCCGT TTCCAGAAG TCACCAAGTA ATATCTGCTT TTCATCAGTT GCAGTTAAGA TTTTNNTTTC TTGAAATACT
GGTTTTCAAA CAGATCAGAA TTACCTGGGG AGCTTGTTTA AAATATAAAT GCCCAAGGC CAGCTCCAGG ACATTCTGAC

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CCTAAAGGCA TCCTTTTCGT AGTGTGTGTC CCATAGGTAT GGCTGCTGAG CACCAGGGCT GCTCACCATG CTCCAAGAA
GCAGAGTCAG GGAGGCAGAC AGCAGGGTTT ATTAAGGTGC ACACCCATGT CTGAGCCCCA GCTCTCTCCG NCTTCTGTGG
GGAGGAAGCC CTCGGTCTT TCCGAGGAAC CTTCAAA

SEQ ID NO:2378: (Length of Sequence = 454 Nucleotides)

GACGGGTCTT TCAATAGCAA GTTTTCACIT CATCGACAAC ATCACGAAGG TGGTAACAAA CAAATGCTTT ATCAGGCTGG
ACTTCATTTC AAACCTCCCC AAAGCACAGA TCCATTACGC ACATTTAAG ATACCATCTA CCTTACTCAG GTGATGCAGG
CCCAGTGTGT CAAAACAGAA ACTGAATTCT ACCGCCGTAG TCGCAGCGAG ATAGTGGATC AGCAAGGGCA CACGATGGGG
GCACCTTAIT GGCAGTTGAA TGACATCTGG CAAGCTCCTT CCTGGGGCTT CTCTTGAGTA CGGAGGGAAA GTGGAAAATG
CTTCATTACT TTGCTCAGAA TTTCTTTGCT CCACGTGTC CAGTAGGCTT TTGAGGAATG AAAACACGGT CTATATCTAT
GGGTGTGTCA GATCTTCACT CGGATTTATC GATGACACTC AGTGTGAGGA GTCC

SEQ ID NO:2379: (Length of Sequence = 224 Nucleotides)

GGAAGAGACC TCACAGGNA TTAAANGTGT ATTTTNTGGA CCTGGGCTTG GCTGGAATGC TCAGGGGTCC TGAAGATCCT
ATTATAGCTT CCTTCTGTG AACCATTAAG AAAAGATGGC GANAGTCAAC ATAAC TAGAG ACCTCATCCG TAGNAGATCA
AGGAGCGGGG TGCCCTTAGC TTTNAGCGGC GCTACCATGT CACTGTNCCC TTTATCOGC GGCT

SEQ ID NO:2380: (Length of Sequence = 274 Nucleotides)

AGGTTTGAAA TATCTTTTTC CAATAGATAA TCTTATTAC ATTAATACAG AATCATTTTA CATTCTTAAA TCAGACACTA
ATAGATGCTT TATTTTAGTG AATTATAAAG GAAAACAAA AGGAACTGT TGAGAAGTGT TCTTCATTAA CNGTCTAAC
GNCAGCCGA AGATCCNGA ACACATGGAA ACTGCGNCAT GCINCCNGCA GAGGCTGGGG AATGGGGGTT CTGCTCTCAC
TGAATGGTGG GGAACCTCA ACTGCTTAGC CTGT

SEQ ID NO:2381: (Length of Sequence = 312 Nucleotides)

GCACAAACAG TTTTATTGTA TGANCCACAG TGACTAACAG GNTCAGAAGA CAGTGCAGAT ATTCTGAAGA AGGCACTGNG
GGAGGTAAAG GGGTATCACA GCAGGCAGCC TCTCTGNTT CTNTCCAGT TCACAGATGA GTTCCAGGCA GGAAGTCTCT
GCAGGTCACC CACGGCGGCC TCAGAGGGAC AATTINTTCC CTCTAGAAG CCINTTCCAG TGTTCACTGG ATGNTTTGAG
GACAGNTCTG GGCAGAGGAG GTGACTCTGT GAAAGATGCT ATCTTAAGAT GGGGAGACTA GGCTGTGAGG AG

SEQ ID NO:2382: (Length of Sequence = 402 Nucleotides)

CTTAAACTAA CTTTGAAGCA AGTAATGTCA ACTTTGAGCA CTTTGTGTGAG TTTTGAAAAA TCTTATTGT TGCTGCACAG
GTTAATAAAT TATCAATTG TAATTCAGCA TGTGGTTCAG AGACACGGTC ACTGATTCAC ACCCAGTCCC TGCCACAGAC
CGTCTCAGAC ACGCACAGTG GGCCTGCTGC ATGATTCACA CCCAGTCCCT GCCACAGACC GTCTCAGACA CGCACAGTGG
GCCGTGCTGA TGCGTGTAC CTGGCTTTTG GCTCCAGCT CACTCATAGC CATGTCCACA TGGGGGGCTT GCACACAGGA
TCACTTCAT ATGTACATGT ACCCACCACA AACGTGCAA GCTCCTTGCA CACATGCATG CACACAAACG TGGTACACAA
GT

SEQ ID NO:2383: (Length of Sequence = 406 Nucleotides)

GACCTTTTC ACTTAGCCCT CTGGGTTTG CAACATGCTT TCTCTCTCAC CTCTCATTG AATGAGAAAA AACAGCCCAG
CCATTTTTTG CAAACAGCAA AGCACCAGAG TGATGATGGC TTTGCTCATC TCACTTGACT TTCACAGTAA CTCAGTTTGA
TGTAGGCAGT CCAGGCATTA TTATTTTCAT TTTACAGATG ATGCAACTGA GGCTCAGTGT GGTGAAACAT TTGGCTCATA
GCCACACAGC TGATAAGCAT CAGGGACTTG GGACCTAGGN CTTACATTT CAAGTCAGCT GTATCTGTCC CCAAGCCCCA

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CGTGGCCGCA GAGGCAGCTG AGCATGAGGG ATGGAGCGTG CTGCTGTCTT GCAGGTGCCG TTAGCCCTGT TTGCACTGG
TGGATTGATC TGCTCAGGCG CACAGGGAGA TGGCACAGCA GGACCCGCG CCCAGCCTCG CTGAGGGCAT GCTCCCGCCT
CACCTCCAGA GGCTGTTGGG CGGAAGCGAG AGCTGCAGCA GTTGGGGCCA GCTGGGACT GGAGGCCAG GTGAATCTTG
TGGGGCAGGG GACGGAGCTN AGGCTGTCCG GCGCGGGCCC TTCCACCCA AAGGCCCTAG AACCTAGGC CTCAATCTCT

SEQ ID NO:2372: (Length of Sequence = 326 Nucleotides)

AGGCCCTGGCA TGCGGCGAAA AGTTCCTGGA GAAGGCCTCC CCTCCCCAA AACACCGAG AAACGTGGG ACCTCATTAT
TGAGTTTGAA GTGATCTTCC CCGAAAGGAT TCCCAGACA TCAAGAACCG TACTTGAGCA GGTTCTTCCA ATATAGCTAT
CTGAGCTCCC CAAGGACTGA CCAGGGACCT TTCCAGAGCT CAAGGATTTT TGGACCTTTC TACCAGTTGT GGACCATGAG
AGGGTGGGAG GGCCAGGGA GGGCTTTCGT ACTNCTGAAT GTTTTNCAGA GCATATATTA CAATCTTCA AAGTCGCACA
CTAGGA

SEQ ID NO:2373: (Length of Sequence = 361 Nucleotides)

AGCAGAGCTG AGGGAAGCG TAGGATGGCT CCAGCTTCCG GTCAGTGGCT ACATGGTCAG TTCCATGATG GCGTTGACGA
TGTCACGTG GTGTNTCTC AGAGCCGCA CGCCTTGGC CCTGGACACA TTGGCCTCG CCATCACCAG CTCAATGTCA
CGCAGTTCCA GCGCCGCTC GTCCACCTCT TCTCTCTCT CCTCTCTCT TCTCTGAC TCCAGCCTCA CCGGGGCT
GGGTGCTGAC TCAGGGACCA AGGCTGAGGG CTCTGAGGAC ACCTTAAACT TCTCAGCTGC GCGTTGTGC ACTTGCTGGG
ACAAGGCTCT CAATCTTGGN CTCGCCAAG ACCACATAAG T

SEQ ID NO:2374: (Length of Sequence = 281 Nucleotides)

TGACTCTAGT CTGGCACTTA TTGATGACAT TGAGAGGCTG AAATATGAAA TNCAGAGGT GATGACAGAG ATGACAATC
TAACTTCCGT AGAGGAGAGC AAAACGACTC AGAGGNACAA ACAGATAGCC ATGGGAAGAA AGAAATCAA CATGGNTCC
AAAAAGGAA TTCAGTTTCT AATAGAAAAT GACCTGCTAC AGAGTTCCCC AGAAGACGTC GCGCAGTTCC TTTATAAAG
AGAAGGCTA AATAAGACCG TCATTGGGA CTACCTGNGG T

SEQ ID NO:2375: (Length of Sequence = 391 Nucleotides)

ATGTTTAGTG CTCTCTCAG GAGCTCTGGT AGGCAGGTC TGGTGGTGAC AAAATCTCTC AGCATTGCT TGCTGTAA
GGATTTTATT TCTCTTAC TTATGAAGCT CAGTTGGCT GGATATGAAA TTCGGGTG AAAATCTTT TCTTAAAGAA
TGTTGAATAT TGGCCCCAC TCTCTCTGG CTGTACAGT TTCTGTGAA AGATCTGCTG TTAGCTGAT GGGCTTCCCT
TTGTGAGTAA CCGACCTTT CTCTCTGGCT GCGCTTAACT TTTTNCCTT CATTTCAACT TTGGTGAATC TGACAATTGT
GTATCTTGA GTTGTCTTC TOGAGGAGC AACCTTTGTG GCGTCTCT GTAAATTTCC CGAATTGAA A

SEQ ID NO:2376: (Length of Sequence = 324 Nucleotides)

CCAGCCCTCC CTCAGCTGG AACACAGCA GTGCGCTCA GACCCCTGCT TCTGCACAAG GGGGGCTGC CCGCTGCCC
CAGCTATATA CACGACAGC CATCTGCTG GCGTGGACA AAAGCTGGGA GCTCTGTGC CCAGTCAGGA GCGCTACAG
TCCACCAGCT GCGCGCCCG GTCCAGGGC CCACTGTGGT GCCAGNAGT TINTCAAAC CNAGGGCCA GCGCCAGCTG
GCTCTGCTC AAGCCCCAG CCGTTTGTG GGGATGGAG CTCCACTG AGGCTGTAA AAGCTTGAAC TCAACAGCAG
CAAT

SEQ ID NO:2377: (Length of Sequence = 357 Nucleotides)

GTTTATGTTT TTATTTATGT ATTTAACTG ACTTATTTGT GTATCCCACT AGAACAATAC ATTCAATA TACTTGAGA
ACTGTGCCCTG GTGCGTCATG GGAGCAGAGA ACTGTCCAG TGAATAGTTG TTGAAGAAAG GAGTAAATC TCCCCAAAC

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SEQ ID NO:2365: (Length of Sequence = 423 Nucleotides)

TTTTTTGCCA TTATAAAGT ACITTTATTGA TATTATATCA CACAGCACTT TACAGTATAC TCAAAGATAG CCTAAATTAT
 GAATTAAACA TGCAATATT TNCITTTTCCA AAATGTGGAC AAAATGTCTT TTAGAGTGCT TTTGAACACT AGCCTTAGCT
 ACTAAGCATT CATGGGTTTG ATCTTTCTTG CGACATGACT TTAAGTAAGT TAACAAAAA TGTAGCTGTA GACAGTAATT
 GTTTGATAAA TATGANCAGT TTTAAATGG CACTGAATT ACATCTTTAA TCATTTTAAT AGGGCCATCC ACAGCCTCTC
 TTGTGCTCTT AATTCTCAAC CTCGGGGTTC TTTAAAGGGC TGGTAAAGGC TCAGAAAGTG NCCAGCTCCA TGTGGGGTCT
 CTGTAAGNNG TCTATGCTT CAT

SEQ ID NO:2366: (Length of Sequence = 294 Nucleotides)

CCAGCCATAC ACATGCCTTT ATTTAGATCA GCTTTTTTCA AAATGCAGCC AAACITATGA GTTGGACAGC CCAAAGTAAC
 CAGCCCTATT CCACTGAGTT AGTTTACCCC ACAGCAGTAG AACCAGTGTC TGGTTTGGTT CCTGGCCCAT GGTGGGACAG
 CGTGAAGGTG ATGGAGGGCT CTAGCACAAG GAGGTGCTGA GTGCCACCGG CAGGTGCTTC TGCAGACAGC CTAGAGCAAG
 GTAAGCAGGA GCACTCGNTT CAGAACCGAG GCGGCTCGGA CCAGAGGGCA GGCA

SEQ ID NO:2367: (Length of Sequence = 393 Nucleotides)

ACGGACAGAG CGAAGGGGAG AGGATGGTAG TGCTGACTT CCACGTTTTT GTCAGGGATG TGTGTCAGCA TGTGGATTCC
 ATGCAGAAAG ACTACCTTGG GCTTCCTGTC TTCCTTCTGG GCCACTCCAT GGGAGGCGCC ATCGCCATCC TCAAGGCGCG
 AGAGAGGCGG GGCCACTTCG CCGGCATGGT ACTCATTTCG CCTCTGGTTC TTGCCAATCC TGAATCTGCA ACAACTTTCA
 AGGTCTTTCG TCGGAAAGTG CTCAACCTTG TGCTGCCAAA CTINTCCCTC GGGCCCATCG ACTCCAGCGT GCTCTCTCGG
 AATAAGGACA GAGGTGACA TTTATAACTC AGACCCCTG ATCTINCOGG GGCANGGGCT NAAGGTGTGC TTT

SEQ ID NO:2368: (Length of Sequence = 187 Nucleotides)

GATCTTGAAG TTAAACCACT GTTAGAAGTT TTGGTGGGGA AGACAATTNA GCAGTCTCTT CTGGANGTAA TGAAGAAGA
 AGAGCTGGCT AACCTGCGGG CCAGTCAGCG TGAGTATGAA GAACTACGGA ATAGTGAACG TCCTGAAGTT CAACGACTTG
 NAGAGCAAGA NAGGCGACAC CCAGAAG

SEQ ID NO:2369: (Length of Sequence = 341 Nucleotides)

GTATCTTTAG TAGAGGCGGG GTTCCACCAT GTTGCCAGG CTGGTCTCGT ACTCCTGACC TCAGGTGATC ACCTGCCTCC
 TCGGCCTCCC AAAATGCTGG GATTACAAGC GTGAGCCACC GCGCCTGGCA CCATCAGTTT TTGATCCTGA TACTGTCTG
 TCCTCTTGGT TCTCCTCATC CCTAATTTAA CCTTGAACAC AAAATTCAAC AGGTTTTGGC ATATAGAATA AAGATTATCA
 GGCAAAGGCG CACTCTTGAC CTAATGATAT ATCTACATTT CATTTCTGTA TCTATCAGCA ATATTAAATT TGTCTAGAAA
 TGATGAGAAG TTTAGAGGAG G

SEQ ID NO:2370: (Length of Sequence = 337 Nucleotides)

AGATCAAGAT CTCTCCCAA ATGCCAGTAT GCAAAGGACA CTTGGGGCAG CCTCTCAACA TTTTCTGCCT GACTGATATG
 CAGCTGATTT GTGGGATCTG TGCTACTCGT GGGGAGCACA CCAAACATGT CTTCTGTTCT ATTGAAGATG CCTATGCTCA
 GGAAAGGGAT GCCTTTGAGT CCTCTTCCA GAGCTTTGAG ACCTGGCGTC GGGGAGATGC TCTTTCTCGC TTGGATACCT
 TGGAAACTAG TAAGAGGAAA TCCCTACAGT TACTINGACTA AAGATTGAGA TAAAGTGAAG GAATTTTTTT GAGGAAGTTA
 CAACACACAC TTGGATC

SEQ ID NO:2371: (Length of Sequence = 320 Nucleotides)

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SEQ ID NO:2359: (Length of Sequence = 352 Nucleotides)

CTTCATTAAAC AAGCTGCGAG AGAAGCTGGG TTGCCAGGAC GCCTTCCCCG AGGTGTACGA CAAGATCTGC AAGGCCGCCA
 GGACTGAGCT GGAGCCCGCC TGGAGAGACA GACACGTGTG AGTGGTCAGG CATCTTCCCT TCACTCAAGC TTGGCTGCTT
 TCCTAGATCC ACACTTTCAA AGAGAAACCC CTCCAGAACT CCCACCCTGA CAGCCCAACA CCACCTTCCT CCTGGCTTCC
 AGGGGGGCAG CCCAGTGGAA TGGAAAGAAT GTGGGATTG GAGTCAGACA AGCCTGAGTC CAGTTNCCCG TTTAGAACTC
 ATTAGCTGTG TGA CTCTGGG TGAGTCCCTT AA

SEQ ID NO:2360: (Length of Sequence = 359 Nucleotides)

TTTTTTTCAG CATAGTCATC TTAGCTTAT TGAGTAAGGC ATCCCAATCT CTGCTAAGAT TCTNCTAAAT GAACGGCTGA
 TTTTCCTGCC AAATATGCA TTGGTCAAAG AGAAATCACC ACCTGGCCAC CCCATTCTGT CCCCCTACAG GACACTAAGG
 GTTCTTACAG ATAAAGGGAC GATGCATTCA TGCCCTGGAGA ACTAATCACA CCTGATTCTT CTGGGATCTA AANTAAATGTC
 AAATTTTGAT TCACTTTATG TAAAGAAAAA TCCTTTINTT TTINTGCAA CCNCTTTCAA GANCAATGCT GCCCATCCCA
 TGCAAGATGT TGTGTGAAG CCANCTCTG GTATACTAA

SEQ ID NO:2361: (Length of Sequence = 437 Nucleotides)

CTCCAGGATT CCAATCCAGT CCGAACTCAA CACGAGGGGT GGCACCTACA GGCTGGGGTC AATCTGGAAG ACTGCCTGTT
 GTATGGCCTG GCAACTAAAA AATGTTTTT ACATTTTTAA ATGGTTAACA AAATTAAAT AAGAGAATAT TTCATGACAT
 CATCAAATTA CACGAAATGC AAATTTACAG ATCTACAAAT ACAGTTTGAT TGGGACACAG CCACCCTCAT CCGTTTGCAG
 GCTATCCCTG GCTGCTTACA GGGTCCACAT AGTCATAAA GCCTGAGGAT ATTTACTATC TGGCCTTTTA CAGAAAAAGG
 TCCCCAAACA CTAAATCTGA AATGTTTGC ATCAGAACCC CTGTGGGGC TTGTTAGGAA TGCAGCTCCC TGGTCCACA
 NCCAGTCTCT GGATTCACTA AGTCTGGAGC AGGGCCT

SEQ ID NO:2362: (Length of Sequence = 317 Nucleotides)

CTTCTCTGGA TGTGCTGGG CTGGACTGG CTAGAATCTT TCTCTGGACT NTGTCATGTA CAGTGNCTCC ATCCTGGAGG
 CAAGAGAGTT GGGAGTGGCT CGAATCANAG CCGTGCCCAA GATATCCCTN CTGTTGCATC GTTGAAGCT GACGTCCTGT
 GTCINTACAC TGCTGCCACT GTTGINTCCT CGNCTGCTT GCTGTTGCCT CACGCCAGGN CCGTCTCTGC CGTGACANCC
 TTCATCCTAC CCTTGAACC CCAAGGCCAA GTTGGTTCAA ACTGTTGGAG AACAGAGTTG GCCTGCATCT TGAACA

SEQ ID NO:2363: (Length of Sequence = 412 Nucleotides)

GTCAGAGINT TGATAGTTCT ACTGGGAGAC CACAAAATGA CATGGTCCAT CCTCCTCCTT ATCCAAAGAT GCATGGTTAA
 AATAATATAG ATTAGGAATC ATCGTTACCT CCAAACAGTT AATTCAATC AAATTTTATG CCCAGACTGG TTTTAAAGA
 CATTTTCTGC CAAAATTTT TGGAAGTAAA CACATTAAGG GTAGGTGTGG AGAACGATTA ATGGATTCAT TTTTATACTC
 ACATCTGTTT TGGAAATATA TTTTATGCAA TAAAGCATAA ACTAACAGGT ATACTTATAA ATGCTCTGTT TTAGAAACAC
 TAAAAGATCT CCAATCTTAG GAGGCCTTAA TTTGAAACTC TGCTTTTATT TGCCTGAAC AGTGGCTAAC CTGINTAGGC
 ATCTCACGAG GG

SEQ ID NO:2364: (Length of Sequence = 334 Nucleotides)

GAAATGATTT AATATTAGGA AAGGCAAGTN CCTCGAGACA TTTATTTAAG CTAATCTGTC CTTGATTTTT GACTTTTCAA
 TTCATTACAC CCAGCCACAT TAGCCTGCAC CATTA AAAAC ATTGATTCAA CCTCTCTTAT TGGCATAGAC AATACATCTG
 CCTGTTCAC TACTCTATCC TCAGCTTGGT ATTCTCTAG CACAGAAGAA TGGTCCAGTA GATATGCTGA AGAAATACCT
 GAATGCATAA ATAAATAAGA AAATGAGAGA CTGAATGANT CAATTAATAC CTCAAGTGTT ACCCTNGATA AGGTTCTAGA
 GAGGGGAGGT TCTA

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CATCATTGGT AGCAAAGATT TACAGAAATGT CAACATCACA CTGCGCATCC TCTTCOGGCC TGTOGCCAGC CAGCTTCCTC
GCATCTTCAC CAGCATCGGA GAGGACTATG ATGAGCGTGT GCTGCCGTCC ATCACAACCTG AGATCCTCAA GTCAGTGGTG
GCTCGCTTTG ATNCTGGAGA ACTAATCACC CAGAGAGAGC TGGTCTTCA

SEQ ID NO:2354: (Length of Sequence = 363 Nucleotides)

GGAGAGGGAT TGGCATCGGC ACCATGGAGC TCCCAGGGCT TAGAGATGGA GCAAAGTTGG CCTCACCTTG GGGAAACCATT
CCTGCTCCIG GATACTGGAA GACATTCIGC TGCACTINAG GATIGATTCC AGTGCCAAAC TGTCCTCCTA TGTTTCCIGT
CATGCCTCTG CTCACCATGC TGTTCGGTGT GGCCAAGGAT GCTTCAGGAT TTNCTGCTAG TTGTGAAAAC GGGCTGGTAG
AAGCAGGTGG GGTTCCTGGG ATTTGTACCA TAGTTTNGTG GATAGGGGAA TTGCTGTGGA GCACCTTGAG GAAGACGGG
GTINCCCAT TNAACTGGTA GTCCAGATGA GGGAGGGAGG GTT

SEQ ID NO:2355: (Length of Sequence = 403 Nucleotides)

AACCAGGAAT GGAGGGCCTC CTCATGTCTG AGGTAGAGTA AGACGGTGTG AGGGGGCGGA CCGGGGGGCG GAGATGAGCA
CCGGCCGCAC TGGGGCATCA TCCNGGCCCA CCGGGGACGA TGGGCGGTGG GAGGGCTCAG GGCGGTGTGG TGGCCACACT
GCGAAGAATG GATTTTTTAAA ACACTTCATA GCCCGGANIT TTTTCAGCT CCTCTTCGT GGACACAAC TCAAGGCTCC
CTGTCACTG GCTTTCGGGG GTGGTCTCCC CACTTGCAGA GTCTGGTCTC CACAGGACAC CGTCTTCCC TTCCCTTCCA
AGGGGCAGGN CCCACGNACC CTCGCCCAA AANTAAAGGA GCTTGTGTGT TGAAAACGCC AAGGCAAGCC GTCCAGGGA
GCT

SEQ ID NO:2356: (Length of Sequence = 456 Nucleotides)

GAAAGAAAA CAATTGGTCA AACCACAAGA ACACTGTAC CTGAGCCTG AGAAGCCAAT TCAGATTCAA CCTGAATTT
GGTIGATTG GATTAAGTGA CGCAAAAAGT CAATAGAACC ATTGANTTTC AGAAATCATA AAGTTGCACT ATGCCAAAGA
AAAGAGTACA TGTAATCAA GCGTAGATAG AAAACATCAA GCCAAGAAAA CAACACANTT CACATAATTT TTTTGGCCCC
GACAAAACAT TTAAGCAGTT AATTTTGTGT TGTTTTGTGT TGTGTGTGT TGAAGAACAN TTGTGGTCTT TTACATTTTC
TTGTGGGGAG AGCAAAATCT GATCAGCATT AGTGCTGTGA AATACTTTTG GNTTATCATC CCCCAGTNT AGGGTGAGAT
CATGAGGAAA NTTTTGGCAG TCCTTCTCTC AGATTTNGIT CACTNAAANT GCTTGG

SEQ ID NO:2357: (Length of Sequence = 412 Nucleotides)

CCACCCCATG CCCACAAGC CATATTGTCA ATAAATAAGG AATAACTGAA ACCAGACCCT TTAGGAAGAG ACAGAAATTC
CATTACCCAG GAAACCACTC AGTGAAGATG CTGATAGTTC TGATATGTTT TTATGCCCTG CCCCCTTCCC CCAAAAAACC
ACCTGCAGAA CCAAATGTTT CTCTCAAAG CCCATCAGCA CAGATTGATA ATAATATCAC TATCAAGCCA GGGCTAGTGC
TTCTCTACAT ACTGTACTGT CACAGGTACA AAGCAAGCCC TGGACAGATA CTGTCTCCCT GCCCCACAA ATCCAGGGAG
GAAAAAGACC AGGGANGCTT TGATTTCCTT GGGATTTAAA CCTCATGTTC AAAAAAGNTA ATAAAGGTGC TCGTACTTGT
ATCTTCTTCC CT

SEQ ID NO:2358: (Length of Sequence = 399 Nucleotides)

AGATGGCAGC AGGTTCAGT GGGGCCCCCTT GGATGCCTAA GCCTGGGGAC GACTACAGCT ACAATCAGTT TTCCACATAT
GGGATGCCA ATGCCGCTGG TGCTTATTAT CAGGATTATT ACAGTGGTGG CTACTATCCT GCACAGGACC CGGCCCTGGT
CCCCCCCCAG GAAATTGCCC CAGATGCCTC CTTCATCGAT GACGAAGCAT TTAAGCGGCT GCAGGGCAAG AGGAACCGAG
GGAGAGAAGA AATCAACTTT GTGAGATCA AAGGTGATGA CCAGCTCAGT GGGGCCAGC AATGGATGAC TAAGTCATTG
ACAGAAGAGA AAACCATGAA GTCATTGAGC AAAAAGAAAG GTGAGCAGCC AACAGGCCAG CAGCGCGGGG AAACACCAG

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TGCTGCTGG GAAGTTCAAG ACAGTGGACA GACCATTCCA AAAGCCCAGC AGATGCACAC TGGGCCTGTG CTTGATGTCT
GCTGGAGTTA CGATGGGAGC AAAGTGTITA CGGCATCGTG TGATAAACT GCCAAAATGT GGGGACCTCA GCAGTAACCA
AGCGAT

SEQ ID NO:2348: (Length of Sequence = 363 Nucleotides)

GGCCTTTCAA GNAGCGGCGG ANTTCCCGA CGCTGTAAG GAGGTACAGC AGATCCGCGA CCAGCACCCC AGCAAAATCC
CGGTGATCAT CGAGCGCTAC AAGGGTGAGA AGCAGCTGCC CGTCTGGAC AAGACCAAGT TTTTGGTCCC GGACCATGTC
AACATGAGCN AGTTGGTCAA GATCATCCGG CGCGTCTGC AGCTGAACCC CACGCAGGCC TTCTTCTGTC TGGTGAACCA
GCACAGCATG GTGAGTNTNT CCACGCCCAT CGCGACATC TACGAGCAGG AGAAAGACGA GGACGGCTTC CTCTATATGG
TCTACGGCTC CCAGGAAACC TTCGGCTTTC TGAGNCAGCA GTA

SEQ ID NO:2349: (Length of Sequence = 332 Nucleotides)

TCCTCCTACT GATGCTTTC AGTAGATTCA GAAGTGATTG TGGCAAACAT AGTATCTGA AGGAAGAGAT CGTGTTTTGA
TTAGCATCTC CGAGCGCTAG TTTTGTGTTT ATGTTTCATGG TATTGAGGAA ATAAAGATCA ATTTGGACTT CTGACACCTG
TTAATACATC CTAGTTCCTG ACTGCAGCAA AATGACTCTC AGTGCCCCCTT TCTCTTCTTA GTGATTGCCCT AAGATGACAG
CTTCATTCCC TTTTAATTAT TATCCACCTT CTTCCTCATC TTCANTTGTT TTCTCAAGTG AGGGACTTGG CCTCTACTGG
GACTCCACTG GG

SEQ ID NO:2350: (Length of Sequence = 339 Nucleotides)

GAGATGGAGT CTCACCCCTT CGCCAGGCT GGAGTGCAAT GGCACGATCT CAGCTCACTG CAACCTCTTC CTCACAGGTT
CAAGCAATTC TCCTGCCTCA GCCTCCGAG TAGCTGAGAC TACAGGCGTG TGCCACCATG ACCGGCCAAT TTTTGTACT
TTTAGTAGAG ACAGGGTTTC ACCATGTTGG CCAGGCTCGC CCCGAACCTC CGACCTCATG ATCCACCTGN CTCGGCCTCC
CAAAGTGCGG GGACCACAGG CATGAGNCAC CGCACCAGA AAAAGCAAAT CTCITAGTAT TTTTCTCTT GTCCAAAAGG
TTCTGACCAT GTTCATGAC

SEQ ID NO:2351: (Length of Sequence = 354 Nucleotides)

AGAAGGACCT GAGTGTGGC CAACAACAGG CTGCAGAAAG GCAATGCCAT CCTGAAGATT TCTCAACTAA GAGTCTGCAC
CCATGACAGC CCACCGAGAC CCTCGCTCCA AGTTGTGGA GAAAGGGAAC CCGCTTGGCA GCATGTGGAA AGACCCACG
ATGAGCAGCA GACACAGCAA CGCTGCCTCC TACATCTCGA CAGCATCTGT GTAAGACTCG CTAGCATCTG GTGCACACAC
TGTATGAGAC AGCAACAGCC AGAACAGACA GCTTTACGTT GATGAACACA CAGACGGTGG CGCATGTTCA GAGATGCCGA
GGGACGCCG CAGTTCCCAA AATCACCTCT GGCC

SEQ ID NO:2352: (Length of Sequence = 378 Nucleotides)

GTTGTTTGT TAGTGGAAAC CTCAAATCAA AACAGGCTC ACGGTCTGAA TAGTCTTCTG GTCTAAGCAA CTCAGCACCA
GCGCGCCAA GGGGAGGCCG CCTTGTCTT GGCCCGGGA AGAGACGCG CTCCAGCCCC GACGCAGACC CCATGGCGCA
CACAGGCAGG CAGAGCTCGA GGTNCAGGCG GCTGCCTTGC GGAAGTGGC TGGGGAGGG TCCCTNGCTG AGGCTGCACC
AAGGGCTNGG GAGAGGCCCA GGAAGGGGAG AGCGAGCTGN GAGCTTGGGA TGGGAGCCGT GAGGTGGGGA TGGTTTNGCA
GAGGGGCAGA GCCAAGNCA GAGGCAAGTT CTNGGGCCCC ACAAGCTTAT GGTGCGCA

SEQ ID NO:2353: (Length of Sequence = 369 Nucleotides)

CTGCCTTATA TAATGTGGAT GCTGGGCACA GAGCTGTCAT CTTTGACCGA TTCCGTGGAG TGCAGGACAT TGTGGTAGGG
GAAGGGACTC ATTTTCTCAT CCGTGGGTA CAGAAACCA TTATCTTTGA CTGCCGTTCT CGACCAGTA ATGTGCCAGT

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TTTTGCTTAT TACCOGATTT ATTAGAGAGA TCTCTAAAAA GACGGGGTGT GGOGGGGGTA GGTGGGCGAG GAACCTGGGA
 TGCAAACAG TGTTTGGGGC CAGGAGTGGC TGTATGGTTT CANAGGCGCC CACCACTCTG GGTITGAGGG ACACAGCACC
 CTCGTCTGG CGCTTTGGAT TATCAGCAC CAGACCACG GCGGAGGAA TGGAGTGGCA TCCCTGGGGG GAGTTAAGAC
 ACACGAGGTT TGCAGTTTCA TTTTGTTC GAATCAGTTT GGCCATAAAA ATGGGACT

SEQ ID NO:2342: (Length of Sequence = 316 Nucleotides)

CCTGAACAAG GTGTGGTGG TGTTGAATTC TCCCAAGCTG CCATCAGAGG ACCTTCTGTG GCCTGACATT GGCGTCCCCA
 TCATGGTGGT CCGTACTGAG AAGAACAGTT TNAACAACG ATTCTTACCC TGAATGAAA TTGAGACAGA GGCCATCCTG
 TCCATTGATG ACGATGCTCA CCTCCGCCAT GACGAAATCA TGTTTGGGTT CCGGGTGTGG AGAGAAGCTC GGGACCNCAT
 CGTGGGCTTC CCTGGNCGTT ACCACGCATG GGACATCCCC CATCAGTCTT GGNTCTACAA CTCCAACCTAC TCCTGT

SEQ ID NO:2343: (Length of Sequence = 380 Nucleotides)

GGAAGAGGAG GAAGGTGGA CCTTCATCAG ACCACTCCCT TCCCCCATCC TCCAGGAGAG GGGGCAAGGG CAACCCACCA
 TCTACCCACT TACTAACCTG GTCTAACCC CCTTACTGTG CGCGTGTGTG TGCGTGTGCG CAGCTCTGG CTGTTTGTCT
 ATATGTCTAG CTCATCTAGT TCCTCTTCTT AAGGGGATGG GGGTCAGGG CTAGGGGAGG GGGCTGAGTT TCCCCACTTT
 AGGAGGAGGT GGGGGCTATT TCTATGCAA TAGAAATCAG CACATTCTCT CTACTTCCCT TTCTCCACT CCCCCATAT
 CTTTAAAGTG TGAAGCAGA AAAGGACCTG CATTTTCTCT ACAATTGAGG AGCTGACATA

SEQ ID NO:2344: (Length of Sequence = 282 Nucleotides)

GGGAATATAT TTATGCAAT TTATTGAAA TTATTGTAA ATAAAGNTTT TCNCAGTGGN CTAGAAAANC AGCTTGAATG
 NCAATCAGCA TTTATTGAAG AAGGATGACA TCCCINCCAC TTATTGCACA AACTTGGTAG CTTTGAGACA AATACAGTAG
 CACAGTCCGT TTGAAGATTT GTCCAAAAA TTAGTCCATA TTTTAGTGGC TCAGTGTCAA GNGTTCCCTC CCTGTGCCCC
 CACTGTGCT TCTGCAGTGA TAGGAAGGAT GAATGCTTAA TT

SEQ ID NO:2345: (Length of Sequence = 256 Nucleotides)

CTTTATAGGA AGCTGCAAAA GAAATGAGCA GAGCGNGATA TTTGTGGTAA GGGATACAAA GAACATACAA TTGTGTACTT
 GAGAGGTTT ATGGAACATT ATGACCCATC CAATGNAGAC ATCAACATTA ACAACAAAAA TTANTTGAGG AAGAGCAGTA
 TGAAAATATT CTAATGCAGT GCTGTCCAAC AGAAGTTTCT GTGGTGATGG AAATGTTCCA TATCTTTGTG CTAATACAGA
 ATCTACCAGC CACATG

SEQ ID NO:2346: (Length of Sequence = 437 Nucleotides)

GTTGAGATTG ATGCTTCINT TTTTGTGTG CGCTGCTGCC CTCGCGCTGG GAGCCGAGCC GGAGGGAAGG CGGTGGAGAG
 ATGATTGCAG AGTTGGTGAG CAGGCTCTG GGGCTGCTT TGTATCTCAA CACCTGAGT GCGGATTTCT GCTATGATGA
 CAGCGTGTCT ATCAAGACTA ATCAGGACCT TCTCCAGAA ACTCCATGGA CGCACATTTT CTACAATNAT TTTTGGGGGA
 CTCTTCTAAC CCACAGTGGC AGCCACAAGT CCTACGGGCC ACTCTGCACT CTTTCTTTTC GCTGAACCA TGCCATTGGA
 GGGTTGAATC CCTGGGAGCT ACCATCTTGT CAATGTCTG TTGCAATGCA GCAGTCACTG GTCTCTTAC AAAGCTTCIN
 CAAGATCTCT CTTTGGTGAT TGGATACTGG ACATTC

SEQ ID NO:2347: (Length of Sequence = 406 Nucleotides)

CCGGGCGGCC GCTTCCGCC GGGGCGAGAC CCCCAGGTTT AAAATGAGCC TGTTTGAAC AACCTCAGGT TTTGGAACCA
 GTGGGACCAG CATGTTTGGC AGTGCAACTA CAGACAATCA CAATCCCATG AAGGATATTG AAGTAACATC ATCTCTGAT
 GATAGCATTG GTGTCTGT TTTTAGCCCA CCAACCTTGC CGGGGAAGTT TTTTATTGCA GGATCATGGG CTAATGATGT

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SEQ ID NO:2335: (Length of Sequence = 386 Nucleotides)

GCCTTTTGT CATGGTAGCA AAGTGGCTGC TGTGGCTCCA GGCATCACAC CCTCAATCAA GGTAGGAAGA AGAGGCCAG
GGAGGTGTTA GCCATGCTG TTTCTTTTAT TGGAAAAGCT TTCCAGAG CCCAGGTAGA CTTCCTCTTC AATTTCATTG
GCCACACCTG ATCACAATAGC CATCCTAAGC TGCAAAGGAG ACTGGAACAG TGAAAATCTG GATTTCACAGC CTCCACAGTT
GGAGTGGCTG GAGATACAGA GTTGGGACGA CCCCTGAAAA GTGAACCAAG GTCGTCTGCA CGGCTGCCCT GGAGGGCGTG
GTGCTTGAGG TCCCTTCTAC CTCTGGGGCT TCATGGAATG ACTTGTGTC TCCATGGAGC ACCTCT

SEQ ID NO:2336: (Length of Sequence = 258 Nucleotides)

CCCTAGCAAA CCACTGATGA CCGCTGNA GGGGCCAGCC TGTGGTGTCT CTGGGCCTTG CAGCTNTTTC TTTAGGGTTA
GCGTGGTGC CGGGTCACT TTCTGAATCT TTTTTTTTTT TTTTCAAAAA GGAAAGTTT TAATGGAAAG TTGAGCCAGA
ACTAAACCAG GGAGCTGTCT GAAATCATAG CACCCCATCC GGTGGCGGG GAGATCAACT CCGAGCTGTT TTTCCGAGGC
AGTGAGGAAC GGTGCCCG

SEQ ID NO:2337: (Length of Sequence = 338 Nucleotides)

ATCTCTTTC CCACTTCATA AAAGCAAAT ATGTAAGACT AGCATCTGGT TTTGTCCCA ATAAAAAAT CCCACAATT
TCAAGATATC ACTCTAGCTT TCTAAAGTAG AAAGGCAATT CAGGCAACAA AAAATATTTT TTAATAATCT ATAGCCCAA
TCACCAAAG GTAAGGAAAG AACTTTCCTA GCAAGCTCTG GAGAAGACCT AATTGTCNA TCAAAATGGA GCTTTCAGAC
ACTAATCAAG GCCATTAATT AAAAAAATTT TTTCAAGGAA ATAAGGCAGG TTGGATCTCT TTTCCACTT CATAAAGCA
AAATATGTGG CAGACTCT

SEQ ID NO:2338: (Length of Sequence = 410 Nucleotides)

GGGTCTTGT ATGCTGCTA GGTGGTCTT GAACCTTCA ACTGCACTT TGACCTCCA GGCTCAAGTG ATCTCTTAC
ATAGGCTTCC CAATGTGCCA GGATTATAGG CATGACCACC ATGCCAAGCT CCAGATGGTA TTTTAATTC AGCTCACAAT
GTGCCCTCAT CAGATTGCTA GTGGCCAGGA GTGAACAACT GAGTGACTTT AAGAATCAGG ACACCAGGAA TATGTTCTA
GAAAGTGAAG GTATGAGTGG AAAACCTGGG TTGGATTATG AACCAAGGCC ACAATGTGTG CAGAGTGGCC AGGGCAGGGA
GCAGCAGCAG GTGCTGGTGA AAGGAAGGTG GATTACTGGG GGCAATGCCT GTCTTGTGT TATGGGTTTC TTTTGAGGGA
AGTAGATAAG

SEQ ID NO:2339: (Length of Sequence = 336 Nucleotides)

AGGGGAGGAG GGGGCTAAGG GCGCTGGAG GAAGAGCGAA ANAGATGGAA GCCTTCCGGC AGAAGGCAGA GCTGGGGCGT
TTTTTGAGAC ATCAGTATAA CGCTCAACTC AGCAGACGCA CACAGCAGAT CCAAGAGGAG CTGGAGGCAG ACAGGCGGNT
CCTGCAGGCC CTCTCGAGA AGGAGGACGA GAGCCAGCGC CTCCACCTGG CCAGGCGGGA GCAGGTCATG GCCGATNTGG
CCTGNTGAA GCAGGCCATT NAGGNCAGC TTCAGCTGGA GCGGGCGCGG GAGGCAGAGC TGCAGATGCT TCTTGAGGGA
GGAGGGCCAA GGAGAT

SEQ ID NO:2340: (Length of Sequence = 290 Nucleotides)

TTTTAGTAGA GATGGGGGT TCTCCTTGT GTTCAGGCTG GTCTGAACT CCCGACCTCA GGTGATCCAC CTGCTCGGC
CTCCCAAAGT GTTGGGATTA CAGGCGTGAG CACGCGGNC CGGCTTCAG TTTCTTCTA GGCGTCTG TCACCCAAAT
AGCTGCTACC CAGAGNGCG GGGTTGACCT AGGTGAATA TCCACTTGT TTTTATGGAT GGCTNCCTTC CCCCATTOGN
CTTNCAGCA ATATCTTTC AAGTNCANT TTCCAGGGG AGCTCTTGG

SEQ ID NO:2341: (Length of Sequence = 298 Nucleotides)

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GGCCTTTTAA TGCCATAGCT AGTGATGATT CANTCAAAGC ATCAGTCTAA GGAAGGATGA TGGGGGAAGG GACCNAGAT
CACAGNCTT CTCCTT

SEQ ID NO:2329: (Length of Sequence = 383 Nucleotides)

AGTAGAGACA GCATTTCAIT ATGTGGCCA GGCTGGTCTC GAACCTCTCA CCTCAAGTGA TCTGCCTGCC TCGGCTCCC
AAAGTGGGG GATTACAGGC GTGAGCACNC ATGCCTGGCC TTTTTTTTTT TTTTTTTTAA CGAAGTTATT TTCTAGAGC
ATTCATAGTT TGTTTTTATA CAGTTAAGGT TCTCATCCAT CTGGATTTTT TGGTAAGTGT GGGGAGAATA AAATGAGGAG
CCNCTGTTTT TTCTCCAAA TGGCATGTAT TGTCACAACA CAATTTATTG AATCAATAAT TCATCTCTCC CATACGAATT
TAAACTATTG AACTTTTACA TCAAATTTT GGAACACAA AGTAGGTTA ACAAGGTGAG AAC

SEQ ID NO:2330: (Length of Sequence = 392 Nucleotides)

CGAAACGNYC TCAACCTATT CTCAACTTT AAATGGGTAA GAAGCCACT GGTGAGCATG GCAAAGCCCC AGCTCTAATA
AAAAATGCAA AAAATTGGCT GGGAGTGGAG GGGGGCGCT GTAATCCAG CTACTTGGAA GGTTGAGCTG GGAGAGTTGC
TTGAGTCTGG GAGGCAGAGG TTGCAGTGAG CCGAGATCAC ACCACTGCAC TCCACCTTGA GCAACAGACT GAGACTCTGT
CTCAAAAAA AAAAAAANT TATGCAAAGT GTCTTTTCCA ACAAAGTGT AATGAAGCTA GAAGTCAATA ACAGGAAAC
CTGGGNGAAT TTGCAAGTAA GTGAAAGTTA AACAACATTC TTAACCATG GCTCAAAGGA GGAAATGACT GG

SEQ ID NO:2331: (Length of Sequence = 284 Nucleotides)

AAGAAAAGTA AATTCATCTT GCTCAGATC CTTTCTGGAA GAGTTTAGAA AGCAAAGAAT TCACCGACTC AGCAGGAAGC
AGAAAGAGCT GTTCTTCTT TTGACAGCA CAAGCTAATC CCTAGAGAG TGGGGATGTG GGAAACGGAG GGTAAATTAAT
TCTTTGGTCA CTGGTTCACT GCTGAATAGC CTTGGTCACT TTTGGCTCTC TCTATTTTA GGGGGAAAAA TATTTTNGTT
TCITTTTTTT AAAAAATAAA ATGTTGCGAC AATGGGAGAA AATT

SEQ ID NO:2332: (Length of Sequence = 349 Nucleotides)

ATCTTAAAAA GATTTTTTGT ATTINCTTT GAGACTGGGT CTCAGTCTGT TGCCAGGCT GGAGTGTAGC AGCCTGATCA
TGGCTCAGTG CAGCCTCTAC CTCCCGGGC TCAGGTGATC CTCCCTCTC AGCCTCTGA GTAGCTGGGA CTACAGAGGT
GTGGCACCAT GCCCGCTAA TTTTGTATT TTTTGTGGAG ATGGGGTTTT GCCATGTTGC CCAGGCTAGT CTTGAAGTCC
TGGATGTGAG CCACTGCGTC TGGCTTATTA TTTTAAATAT AGTTCTCTTT ACTGCCAGTA GCTTTCATAT AACCTAGCG
ACTAGATTTA GTCACCACTG CTTAATTCC

SEQ ID NO:2333: (Length of Sequence = 353 Nucleotides)

CCACCTCTCC GTTCTCTGCT TCINAACCAC AGCCGCATCC TATTGTCAGC CCTCAAGATT AAGGATGAAA ATTTGACTTT
TTAATTTTAT TATTCCTGTT CTTCCTTCTT ACTTCATTAG AATCATGTTA TTGGCCTAAA ATACTGTATG TAAAGGATGC
TCTGGGGCCC ATCTGGAAGC CTGCATTCTC TGGGGATATA ATTACGCTAA GCAATTTTTC ACCAGGGACA GCATGACTTA
GCTTCTACCT GGGCATCTC TGGCAACACA GCGCTCAGTT CTTCCAAAGG GATTGGCTGC TGTCCCTTCA GGCCTTCTTC
TTGNGTGTGT GTGTGTGTGT GTGTGTGTGA TTC

SEQ ID NO:2334: (Length of Sequence = 279 Nucleotides)

GCGCCTTCTA CNAGCTGCTG CTGCCGNCCT CATNCTGGTG GCGATGCTGC AGCTGCTCTA CTTGTGCTG CTGTCCGGAC
TGCACGGGCA GGAGGAGCAA GACCAATATT TTAAGTTCTT TCCCCGTCC CCACGGTCCG TGGACCAGGT CAAGGCGCAG
TCGNAACGC GCTGGCCTCT GGAGGCGTCC TNGAOGCTAG CCGCATTAC CGCTCTACA GGGGCTGCT GAAGACCACC
ATNGACCCA ACNATGTGAT CCTGGCCACG NAGCCACG

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TTGACAAGTA AGTGTATATA TTTAAGGTGT ACAATGTGAT GCTTTGATAC ATACAGTGTG AAATGATTAC CACAGTTAGG
 TTTAATAATT AACATATCCA TCATCTCACA TAGGTATGAT TTCCTATGTG TGTGGCGAGA ATCTGAAAA TCAACTCTGA
 GCACATTTCA AGTGTACAAT ACAGTATTTA TGATAGTCAC CATGCTGTGA ATCAGATTGC CTACCTTGGT TAAAGTGCAG
 ACTCAGGTGA AGGTCTGGAT GGAGGATCAT ACTTTAATTG ATTTAGACTC TAAATATAAT GTATATAGTT ATTTTGTCTA
 ACCTAANGAA CCTACTCATA AATGGGCTAG TG

SEQ ID NO:2323: (Length of Sequence = 316 Nucleotides)

GAGACAGAGT CTCTCTCTGT CGCCCGGGCT GGAGTGCAGT GGCACAACTC AGCTCACTGC AACCTCCGCC TCCCAGATGT
 CCAAGTGATC AAGGGGTTC ATTTGCTCTT GGGGGATTAG GTATCATTGT GGGAGGAAGC ATGTGTTCTG TGAGGTTGTT
 CGGCTATGTC CAAGTGTCTT TTAATAATAG TGGAGACGGG GTTTCACCAT GTTGGCCAGG CAGGACCTCA GGTGATCTGC
 CCACCTCAGC CTCCCGAAGT GCTGGGATTA CAGGCATGAG TCACCACACC CGGCTTCATT TATTTCTTCA TCCATG

SEQ ID NO:2324: (Length of Sequence = 300 Nucleotides)

GGGGACAGGA GGTGACCTCG CGAGCAGACG CGCGCNCAN ACAAGCAAGC CCGCCCCGGC CTCTCGGGAG CCGTGGGGCA
 GAGGCTGCGG ANCCAGGAG GGCGGAGCC CTCATGANTT CANTNACCTG CTTCTCCCCC TTAGGTTCTA TCAGCCACAG
 TINTGCAAG TTTCCAAGAG CAGCAGAAA TGAACACATT NCAGGGGCCA GTTTCATTCA AAGATGTGGC TGTGGATTTC
 ACCCAGNGG AGTGGCAGCA ACTGGACCCT GATGAGAAGA TAGCATACGG GGATGTGATG

SEQ ID NO:2325: (Length of Sequence = 303 Nucleotides)

CTGTCTCAAA TAATAATGAT AATATTINCT TATGCTTACT TTACTGTAAAG ATTACAGTAT ACATTACAAC ATATGCGTTT
 ATTGACTGTT TATGTTATTG ATAAGGCTTC TAGTCAACAG TAGGTTACTA GTAATTAAAG TTTTGAGGAG TCAAAAGTTA
 TGTGTGGATT TTCAACTGTG GACTTTGGTG CCTCTAACCC TGTGTTGTTT AGGGGTCAAC TGTGTATTCT TTCTGTGGNA
 ACATTTTITAG ATGTTATAGC CTTTAGACAT TAGAAATGGA AATTAGTTG AACTCGNGTG TTC

SEQ ID NO:2326: (Length of Sequence = 348 Nucleotides)

GTTGGTCTCG TGTGGCAGAT GACACAATCT CTCCCGTCCC TGGAGGCCAG CTCCCCCGTG GCCAACCTCA GGCTCCCAT
 GGCATCTCAG GGCTCCTCCA GCCAGACTGG CGCCATCCAA TTAACCTGAT GGTGGCTGAG CAGCTCAGCT CTGTGCCAGC
 CCCTGCAGGA GCCAGATCAT GTTGTCAGG CCCCAGAGGT AGCCGTCTC ACGGTTGCCN TCAGCCAGG GCAGCCTGTG
 GCTGAGCGTC TGTGGTCCG GCAAGGCCAC CGTCTTCCG AAGTCTATCA TCCAGACCTT GGCCAGGCCG GTGTGGTCTG
 GCACGAAGAG GAGGGAGCTT CCTACCAC

SEQ ID NO:2327: (Length of Sequence = 392 Nucleotides)

AGCTGTTTTT TCCTAGCTGC CAAGACTGTT GAGGAAGATG AGAGAATTCC AGTACTAAAG GTATTGGCAA GAGACAGTTT
 CTGTGGATGT TCCTCATCTG AAATTTTGAG AATGGAGAGA ATTATTCTGG ATAAGTTGAA TTGGGATCTT CACACAGCCA
 CACCATTTGA TTTTCTTCAT ATTTTCCATG CCATTGCAAT GTCAACTAGG CCTCAGTTAC TTTTCAGTTT GOCCAAATTG
 AGCCCATCTC AACATTTGGC AGTCTTACC ANGCAACTAC TTCATGTAT GGCTTGCAAC CAACTCTGTC AATTGAGAGG
 ATCCATGCTT GCTCTGGCCA TGGTTAGTCT GGAAATGGAG GAAATCATT CCTGATTGGC TTTCTCTTAC AA

SEQ ID NO:2328: (Length of Sequence = 256 Nucleotides)

ACGAGCACAC TCTTCACAGT GGGCGGAAC ATCAGAAAAT GGGAGCCTTC TTCTAATGGC TGTCNTTTTC TGTGGGAAA
 AAAAAAAAC AAATCCTCCA AACCACACCG GATGGTTGTA AAAAGCTGCA ACGGAACCTT TGGCACCNGA TGAGAAGAGA

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AATCATAGCT TACTGTGGCC TCGATGTCT GAGCTCAGGC GATCCTCTCC TTATAGCCTC CAGAGTAGCT GGGACTATAG
 GTGCGTGCCA CCACACCCCTG CTAATTINAT GTTTGAAGA GACOGGGTCT CACTTGTGTG CCCAGGCTGG TGTCAGACTC
 CTGGGCTCAA GCTAAATCAC CCACCTTGGC TTCCCAAAGT GTGGGATTA CAGGTGTGAG CCACTGCGCC CAGCTCTGAT
 TTTTGTATTT CTTACTTAAG GOGACATACT TAGTAGCTGT GGTCTTGGG GCAGATACCT CCCAAAGCCC CAGTCTGTG
 ATCTATAAAT AATGTAAACAA CAGGGCCCCG CTGCAGGGT TGCTGTGTGC ACATATGTGT GTGTACGTAC CCATGTGCCT
 NTACGAGAAG GGCT

SEQ ID NO:2317: (Length of Sequence = 166 Nucleotides)

GCAGTACTA TTATTAACAT TACAGTACCA AGCATCCGCA AGAGACAGTC ATTGTINATT TTNATCAAG AAATAGGGCT
 GTTTTATACT GTTATTGACA TCAACTTTT CCCAGTGCAT TTTTCAAAA TATTAATAAG TTCATTCCTT TGTCCTTTTA
 ACTTCC

SEQ ID NO:2318: (Length of Sequence = 374 Nucleotides)

TTTATTTTAC ACTTACAAAA GAAATCGCCC ACCCCTTTCG CCCATTCCCC CAAAACAGTC TCTTTTACA AACATTTAAA
 AATTAAAACC AAATGAAGAT AGACAAGTAA ATTTCAGTAC AATTATTTIN CAGTGTAGCT GTCATATTA GAGTTTAAAT
 TTCCTACAAG TGACCAATGT CCAAGTACT TATAGGGAAA TCCTGATTAT CGGCCAAAGG AAATCAATA TTACAAGTTA
 GCAATTCTT AGTACAAAA TAGTCCGTGT GTTGGAACAG CTTTCCCTTG TTACATAGGT CTTAGGTGAG TCTGCTGTA
 ATACCTTAAC GNTTCCGGAT TCINNTTCA CAAATG : AATCGTCACT GCTG

SEQ ID NO:2319: (Length of Sequence = 280 Nucleotides)

CATCTTAGTT CATGGTAAAT TCCTTGGCAG CACTTATTGT CTTGTGTGA GAGCAAATGA TAGAGTCATC CATTCAAGTT
 AATTAGAGC ATCTGCATTG CAAAACGGT CACTAAATTG CTGCCAAAT TTGAGGCTTT TTCTCTGCA ACACAAATTA
 ATTTTAAAG TAGCAGCATT TTCAGGAGAG ACCAAATAAA GAAAGCAACA ATAAAGTTGC CTGTCTAGTG AGATGTCCCC
 AAACATCAA CTTTAAACAT ACCTTTGCCT TINATAGTAG TTCTTACAC AACTGCTTT AATCAAAATG CGTGTCTCTT
 GCTCTGTAT TTTATGTTTT GGCTCTTTAG CAACCTAATT GTATGGTAG ACAGATTCTT

SEQ ID NO:2320: (Length of Sequence = 348 Nucleotides)

GGAGTCTCT TGTCACGGA GAGCAGTGT GAGTGTATG GAATGCTAAA TCTTACCCCA AAGGGCAAGC AGGCTCCAGG
 TGGCCATGAG CTGAGTTGTG ACTTCTGGGA ACTAATTGGG TTGGCCCTG CTGGAGGAGC TGACAACCTG ATCAATGAGG
 AGTCTGAGCT TGATGTCCAG CTCAACAACA GACACATGAT GATCCNAGGA GAAAACATGT CCAAAATCCT AAAAGCAGCA
 TCCATGGTCA CCAGGTGCTT TAGAGATCAC TTCTTINATA GGGGGTACT ATGAAGTTAC TTCCTCCAAC ATTAGTGCAA
 ACACAAAGTA NGAAGGTGGT GCCACACT

SEQ ID NO:2321: (Length of Sequence = 330 Nucleotides)

ATCTAGACTT TNAGTTCCCT GCATCTGCCA CGTAGTTTC TAGCAGGAGT AGTGGGGGGA GTAATACAGA TTCINCCCTA
 GAAGGGGACA CTGGTAACAT GTCCACTCT TGGATTAGCA GGGGTGGGTC CAGGAAGATG ATATTTCNCT CTTTGGCCCA
 CCCCCCTGGC ATTACAGTGG ACCCAACTAG GCCATCATGA GTGGCTTCTC CCTGTATCC CCAGGGGTCA TAGGATATCT
 ACACCGCCTT TNGACCCCA CCTGCACTC CCATCCCTTC CTCCTCCCC GGTTCATGCC CTGCACTACA TAGCACAGCC
 GGGATGCTTN

SEQ ID NO:2322: (Length of Sequence = 352 Nucleotides)

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SEQ ID NO:2310: (Length of Sequence = 359 Nucleotides)

CTGNGGGCTG CCTCTCGTTG GTCAAATCCA ACCAAAAGCT AAGAGCTGGA GAGCTTGGGT GGTGCATCCA AGGAGGCTTG
 CTTCTGGGG CACAGAAGGG AGAGTGGAGA AGGATGGAAA GTGGCTCTAG GGGAGGAAAT GGAGAACATC CAGAACTTTA
 TGTCACTCT GGTGCTTGAA GGCTTTCTC CAGGGAGACA AAAAGTTTGT NTGGCTAAA GCTCCCIGGT TGCTCAGGAG
 CCAAGGGTCA CATAATGTGC CAATGGGGT TTTTGCCTCT GAAAGCCTCT GAGGTATAAT TACTTGCAAT GNNACATCC
 CTTTTCTCTC TCTTCTCTG CCCACCTTCC ATGCCAAGG

SEQ ID NO:2311: (Length of Sequence = 324 Nucleotides)

GTINGGGGCC GGCCTGGCA ACATAGACAC CATCTCTTTA AACAAACAAA CATCATTAGT TTCTACATTC TACAAGGTGA
 AAGACTAATT AGAAGTGAAA AATACCACTG AAATGTTGGT GTACAAATGG CAGCATAATT TGATTTACAC TAGATTTTAC
 ACATTTGTGT CTATTTCAAA TAGGTACTTT TACATTTTCC TTAAGTGCAT CTGACACAGA GTGAATCACA GATATATGTT
 GGTGTCGAAA GCAGAGGTTA CTATTATTAA NCGAAATTT TTGTGGTTT GCAGTCATCA TATCTAATGT GGTTACAGAT
 TGTC

SEQ ID NO:2312: (Length of Sequence = 362 Nucleotides)

GNAATTTATA AAGCTTTATT AAACATTTCA AACAGCTGTG CAACGAACAC ACCAAATAAA AGCTCTAGAA TAGCAGTCCA
 GACGTTTCAC AAGTATGGCC TCACAGTCCC ATTCCCTAGA TGGACTGCCT CCAGTNCIGT NCTCTGCCCTG GCCCATCTCT
 CTTTCCCCTC AGGCAAGAGA GAGATGGATG GNTCAGACTG AAAGGACAGG CATGCTGATC TCCAGCAGGC AGGGGCCAGG
 AGAAAGTCTC GTTTGCCAAC ACTTGTTACT GAAGCGCAGA AAAAGCAGCA AGTGACAGTC ACAAAGTCTT CCTGGGGTAT
 TCTTCATAAC GTACAGTCTA TATGCGCAGG AACGAGGAAG CT

SEQ ID NO:2313: (Length of Sequence = 449 Nucleotides)

TGTAATTTTT AAATTAAGAC TGCCTTAGTG AGAAAATTT AGCAGGTGAG TTAAGGGCAC GAGGAAAGGG CCTTTGTGCA
 GAAGTAATGA CATAGGCAAA TTGTCAAAGG AGAGGTTCCC TGGTGTATTT NTAGAAGAAA GTAGACCCAT GTNTCTGAAC
 CCAGCACACA GTTCACTTAT GGTGGTTTGT AAATCTGCCC TGAATTTC ATGCATCTTT TAAATTTTGT GTTTATTTTT
 NCAAGAAATA AATGAAGTCT TTATTTTINC AATGAGGGCA ATGTTTATTA AGAACAGCAC ATAAGGTAGA AAAGAAGGTT
 GGTTCCTAAT CTGTGTTTAT CTTCCCCACT GATCTTGAGT TTTAAAGCA TAGAGAGCAC GATCCTTCTG TGGGGTCTCC
 ACTGTCAGAG AGCCTGTNCA GATGAGCAGT CACACTGTTA CTCCACAGC

SEQ ID NO:2314: (Length of Sequence = 316 Nucleotides)

CGAGGCAAAC ACAAAGGGCT CCTTCTGCTT CTCTGACCCC ACCTGCAGCA GGTAGTGGAT AACAGCCCTT ATGGCCTCCT
 TCATGACGCT CACGAGCTGC ACCTTCTGTG GCTCCTTAAG CAGTGACTGC TCACAGCGAG TGCAITCCTG GNTCCCCAAC
 TCCATGAGGG CATAGCAGGC GGTACACACA TCCTCTTTCA CCTCCGTGCC CGTNTCCTCC AGTGCCAGCC GCACCTCCAC
 GNACGNCAGA TTCACCAGCA GGGCCAGGAA CTGTCTCCCG GAGCTGCCCG CCGGGATCCA GTCGGAGCCG CAGGTG

SEQ ID NO:2315: (Length of Sequence = 286 Nucleotides)

ATTTTATGT GTAGACAGGC TGTGGGTTC CCTCACTTAA ATTGAAGCTC TGTGAACTT GAGACACTTA AGANTCTTGC
 AAGTNTGAAA AGTGGAGTGA AACAAAACCA TTCTAAAAC GAAAATGTGT AACINCNTTC AGTTTTACAC AGTGNAGAAA
 TAAGTAITAA ACAAGTTAGT CTCAAACGGT TATATCTTAA GGTCACTTTA TTCTGTAT CATTAACTAG ACATATCTTG
 GTTTAGAGAG CAGCACACAA GACATTGTGT ACTNTTTAAT AGCTAA

SEQ ID NO:2316: (Length of Sequence = 414 Nucleotides)

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TTCATGACGG AAGCCCCCA GGGGGGGTA CATGGTCANG GACCTGGATG ACGTCTCTCA TGAGCAACAT GGGCAAGGGG
GCT

SEQ ID NO:2304: (Length of Sequence = 376 Nucleotides)

ATCTTGCTAT GTTGCCAGG CTGGTCTGA ACTCCTATTC TCAAGAGAGC CTCTGCCTC AGCCTTGTAAG AGCACTGGGA
TTATAGGCAT GAACCACGC ACCCAGCCAA GATTGCCATT TTGTATGATG AGACTGGAAG GACCCCATG TTTGAGGATT
TTGCTACAAT ATACAAAAA CAATCTGTGA GACAGTGGCT GGGCTTTTTT CTGCTGAT TAGTTGAGTG CACATACAAC
TTGGACCAGA GGATCTGGGT TTGAATCCCA TCTCTGATAC TTCCCAACT GAGCTGTTTT CCTTATTTGT AAAGACTAAG
ATCGGCTATG TCAAGAGCT CTGTAACTC TCAACACATA CAAAGTACTA CTGCTG

SEQ ID NO:2305: (Length of Sequence = 354 Nucleotides)

CTGCCCAGCC TGCTCTGGC CCCCTGGAAG CCTCCCCACA GCTGGTAATC TGGACTTAAG GATTGCTGGG CCACCGCTC
TCTGCCTACC ACCATTCCAT ATTTAAGTGG AGCCCTAAG TAGAAAGGCC CCGGGGCTTT ATTTTAGTCT CCTTTTCAGG
GATGTCTGG GGGGGGAGG GGGTTCTTGG TGCTACAGCC CTCTCCCCAC CCCTAAAGGG ACGCCGACGC TGTGCTGTC
CTTACCACA TATTAGTCT TGACCTGGC AGGGGACCC ATGGAAGA TGGGAAGAG CAAAATACAT GGAGACGAGC
CACCTTCAG GGATGCTCGC TTGGGATTCC CACG

SEQ ID NO:2306: (Length of Sequence = 345 Nucleotides)

CCAAGATCT AAGTAATTC AAATGCCTTA GATATCAATG AAAGCTACAC ACCATTGAGA TGGGCAAAAT TCTTTCTCTA
CAAAGGGAGT AATCAAGTAA ATACCTGTCC TCTTTCAATG GACTGTTGCC TATTGAGCAT TGTTGATGAT GTGTTTCAG
ATTTCCAGT GAAGTCTGA CCTACCTGT TTGGCCAAAG ACGTAAATG AGAGGAAAG CCTTGGTCTT CTGATCAAC
CAGCATTTAA CGAACAGTGG CTTAATGCAG ATCACTCAAG AGGNAGCATA GCAATGTAAA AGGAATATAA GTAGGTGTG
GATGCTTTT TCCTAGACCA GGAAT

SEQ ID NO:2307: (Length of Sequence = 337 Nucleotides)

AACAGAATGT AAAAATACGC AAGTCAAAC CTGGTAGAAC TGCATGGAGA AACAAATGGA TTCAATATTA TNAGTCGGGA
AATTCAAGC CCTCCTATCG AAAATGGACA GATCCAGCAG GCAGAAAT AGTAAGGACA TTGTGAGCT CTGCAATACC
ATCAATCAAC TGGATATAAT GGACATCTAT AGACTACTTC AACACAGCA GAAGATACAT TCTTCTCAAG CTCACATGGA
ACATTCAAA AGATAGACCA CACGAGGCC CATAAGCAC ACCTTAACAA ATTTAAATA ATATAAATCA TACAGTGTC
TCTCAAACCC NCAGTGG

SEQ ID NO:2308: (Length of Sequence = 216 Nucleotides)

GAGGAGTAAA CTTTTTCTG AGAAGCATGC TTAGGTGTG GGACAGGAAG TGGTAAAGGC AATGCATGCT CCACAGAGGT
GGATGAAGCA GTNACAAAGG AATGATAATT TNANTGCTG GTGGCATCTN CACTGCTGGA GTGTATGGCA GCAATCATCT
TACTCTCCAT CATCTGGTG GGGGCGAGT GTGCAGGAAA GCCACAGGGA TTGCA

SEQ ID NO:2309: (Length of Sequence = 289 Nucleotides)

GGGGCTATGA AAATACAAA AACATTAGCA CATTCTAGT ATGTATGTGT CTACAGGCAT TINCCAGCC CTATGAGAGT
NCTGCAATTT GAGAAGTACT AAAATGTATT GTTTGGTGAC AAGAACTGCA ATAAAAAGAT AAATGATTIN CTGAATGTG
TGGCAAGCA GTCTATTTCC ACTGCAATTT CTGCTACTAT TAGCTTAAAA ATTGCTGAGA CAAAGGACAA CCTTCTGATT
ATNCTGCTGA GATCTAATGC AAAGTCTCT CAGANGCTC ACTACACAT

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CTGAGAAGAA AGAGTGTGTT GTAAAGGACA ATGACTTTGA GCCCAGAGCC CTGAAAGCTA ATGGAGAAGT TATCATTTGAA
 ATTCCAACAA GAGCTTGTGA AGGACAAGAA AATGCTATCA AGTCCCTGGN GCATGTACAA TTTNAAGCAA CAATTGAATA
 TTCCCGAAGA GGAGACCTTC ATGTCACACT TACTTCTGCT GCTGGAACCTA GCACTGTGCT CTGGCTGAA AGAGAACGGG
 ATACATCTCC TAATGGCTTT AAGAATTGGG ACTTCATNGT CTGTTACAC ACCTGGGGAGA GAACCC

SEQ ID NO:2298: (Length of Sequence = 307 Nucleotides)

AGTACACCTA GTATCTTTAC AGTACTATT AAGTATTTT GAACTCAAAG TATATATTCA TCTTAAACTC CTGGAACAT
 GAACCTCCC ATGTAATTIN CTGATGAATG AAAAGGAAAA CTTCCTTTCA AATAAGTGTC ATCTGTTGCA AAAGTATGTG
 ATTTAAAAAC ACATGTAAAT ATAATCTTAG CTCTAATGTT TTCTTTGGG AGTTTGGGAA AAAGCAGTTA CATTTCTCTG
 TTGCTCGGTT TTTATCATTT GAAAATTGGA AGGATTCAAT CTGGATTGCT GAGCTGCATC AGTAGGG

SEQ ID NO:2299: (Length of Sequence = 289)

GTTTTTAATG CATTTTITTT AAAGATTAAA GTAAAATGTC TCAATTGTAA AAAATACACA CCGGGCAAAT CCTTACCTGG
 NTAATAAATA TCTACATCAC AGTACAATAA AATTNCTNCT CTATAAAATT TAAATATGGA TTATAGTCTA TCACTATCAA
 AAGAAACACT ATGCTAATAT TTCCATATTA TTAAAATAAC AGGAAAAAAT ACGNGCTTAT TTTAGAACCT GATGCCATAG
 CCGTTGGAAA GGGCAAAGAG ATTCAAATGT CGATCATCAC TCTCCATTT

SEQ ID NO:2300: (Length of Sequence = 371 Nucleotides)

CACCCATTGA AAAAGCAGCC GCCCTCCTTC CCAGGAGCTG CTGAAGAGAG AGCCTGCCAG AGCCTTGCCA GCAGGGACAG
 CCTCTTAGAT ACCAGCAGCG TCTCAGAACC CAACGTTGCC TTTGTTCTNC ACTGTGCGGA CAGCAACAGT GGTGACATAG
 CTGTNATCGN GGAGGTCCGG ATGGAAGACC CAAAGGAGAG TAGCAGTTCC CTGAAGACTG GGAGGCACAG CTNAGGCCAA
 GACAAACCAC ACGNAACTTA CCGACTGCTG AAACGCAGGA NTCTGATCAT AGAAGCTGTC ACCAATCTTC GCTTAATCGA
 GAGTTTATTC ACGGTTGAGA AGATGATCAT GGATCAGGAG AAGCAGGAAG G

SEQ ID NO:2301: (Length of Sequence = 287 Nucleotides)

ACTTGGTGT GGGATTGTT GTGAGGTTG CTGACACCTT GACCATTTT CACTGGCTGG AAATGAAAGG AACTTCCCAC
 TGTCTTTG AAGGCAATTC CATCTCTCC AGGGTCTTA TTTCTTCCC ATATCTCTC AACTTCCCA ACTTCTGAAG
 AAGGGAGCAA ACTTTGCCA CGAGGAAGGA GTNGAGCTGC CTCTGTACTT GTCAGTGCAC CTGCACTGGT TGAATCCACC
 TTTCTGGGT CACGCGCTG TGCTGGGTG TCACAGCCTA GGACCCC

SEQ ID NO:2302: (Length of Sequence = 358 Nucleotides)

GGAACACAGG ATCCAAACTT GTGGGGGAAC TCGGAGAGAA GATCATGTT GCGCGGTCC TTGGTGGGCC CAAGGATGAT
 GATGGGGCGA GCATAGTGCA CTTCATCTG CGTCACTGTC TCGTAGCTCA GAACCGAGTC TTCTCGACCC TCGATCCAG
 AGCTGGAGCC CCAGTCCCTG GCCTTTAACC TTGACCACTC TCGTGGCTCA ACCCGCGGTT TGCTGGGGAT GAACCAATG
 TGTGCGTCT CACTGTGAGA GTGGACCCG CGTGNCTGCC ACCACTCTC ATCACTAGCA TCGATGACAT GCAGCACATN
 CCCAAGCGG AAGTTCAAGG GCCTGGCTCA GGAAGCCG

SEQ ID NO:2303: (Length of Sequence = 403 Nucleotides)

GTCAGGGCT CCAGATCATC CTCTCCAAG GGCCCGCAG GCGCTCTT GGCCTCTGG TCTGCTGTC CGCTGGCCTC
 CAAGATGGTC ATGATGGAGT TAGGGATGTN AGCTTGTCTG TGGGGGTGA AGGAGCGGAC ATGGGGCAGC AGGGGCTCCC
 GGAGCTCTGG GCACTTNTCA AAGACGGCTC CCAGCTGCTG GGGCGGCANT GCAGGATGAC CTGGAAGCTC TGGGGCTTTG
 TCGCTGGCA GCACTTGATG AAGCCCTCCC ACACCTTGGG GTACTTCCAC AACTGCTTCA TGATGAGGCG GGACAGGATG

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CCGACTCTAC TGAAATACA AAATTAGCG GCGTGGTGA CGCATGCCTG TAATCCCAGC TACTCGGGAG GCTGAGGCAG
 GAGAATTGCT TGAACCGGG AGGTGGAGGT TTGCAGTGAT CACACCACTG CACTCTAGCC TGGGTGACAA GAGCAAACT
 CTGTCTCAA AAAAAAAAA AAAAGNTAA ATGAGGTCAT GAGGGTGAGA CCTGATCCA AGCTCATAAG TGTCCTTAGA
 NGTGTCTTA GAAGTGTCT TAGGACACTT CTTTCTAAGT NTCTAAGTT GGGGAGCTTG CTCTCCCAA

SEQ ID NO:2291: (Length of Sequence = 270 Nucleotides)

CAAGACAGGG TCTATTCTA TCTATTGCC AGGCTGGAGT GCAGTGGTGC AATCTTGGCT CACTGCAGAC TCAACCTCCC
 AGGNTCAAGT GATGGAATTC CCNCAGTTTG TCTTTGACAT TAAGANGACA CCACATATAG ACGGCTGTTT GTCASTGATT
 GCCCAGGNAT TCATGGATGC ATTINCTCTC ACAGAGCAGC AACTAGGGAA GGAAGCACCA ACTAATAAGC TTCTCTATGC
 CAAGNTATC CCAACCTACA AAGAAGAAGT

SEQ ID NO:2292: (Length of Sequence = 332 Nucleotides)

CAGTGTCTT ATATTCTCCA CCTTCCCTTG GTTTCATTTC TCTTCGCTTC CTGAATGAGA AGTGCCCTGAG ATACCTTCAT
 TTCCTTGAA AGTATGATC CAAGTTTAGA CAAATATCTC CCTCTTGTG GAGAGAATTC CTTATATGTG AAAATACCAA
 GACATTCTTG ATATTAGCA GGCACCTCAA TATTGTCTC CTCCTTTTGA GCATAATTAA GCCAGACTGA TGTTCGATT
 TGAGTATCAT CAGCATGAGT AACCTTTTA ATCTCTCTC CCTTAACCTAC TTGTCTTACA CTAGAGTCTA GGTTCAGGT
 ACGTACAGTG AT

SEQ ID NO:2293: (Length of Sequence = 255 Nucleotides)

GCACCTGACT TATGTGAGIN TCAGGCTTCA ATGCGTGTNT TAGAGCTACT CCTTCACACA AAATAGTTCA GAACATAGAG
 AAGGACCAAG GTTAATAAAT GATTTTATC CCAACACTA AACATGATTG ATGGGTAGAG GCTGCCCGAA GTACTGTGTA
 AAGATGGAAT CTGAGATAGA AGAATGCTGT GGTCAATTAG TAATTCTTGC CCATGGAGGG ATTAGTGACA CATGCCTTGT
 ATATTTGTCA TCTGT

SEQ ID NO:2294: (Length of Sequence = 236 Nucleotides)

GGCTTCAGAA GCTATTGGAA GATTCATATC AACTTACTAA TAATCAAGCA CTTTCATATT AAGACAATGT ATGATGTTTA
 GTAAAATTGA TTTTNCATA AAAGAAGTTT AAAATAAAT AGCTATTTC AAGAGATCAT GGTTGTCAGC AAATAGAAAT
 GPTGTGCTTA ACTCAATCA CAGTAATATT CTGTGGTAGT CAATTGATTT CTTTGAGCCN TTATTCTTTC ATCTGT

SEQ ID NO:2295: (Length of Sequence = 308 Nucleotides)

TTTTAATTTA ATCAGTAACT TTATTATAAC AAAACCTGTA TATTACCCAT TAAACTCAT GTGTAACTT CAGTGATGTG
 AGCTGTATTA AACCCAGGTA TTAGTGAAAA TTGCAATTGT AAAACCTGGT AACAGTAGAC ATCTATGGGT GGTCAAGTAT
 TCAAGGACAC CTTTTATTTT AAACAATTTT ATATAATTCA TATCAATATG CAAAATTACC ATAAAAGATA CANGGATTAA
 TACATATTTA CATTTTAGA AATAGTTACT CTGAGGTGA CAGCTGTCAC TTTTCTAAAT ATTTACAG

SEQ ID NO:2296: (Length of Sequence = 279 Nucleotides)

ACCCCTCCTG GAGGCTTCC CCTTCCCAG GCGTCCCTC AGGGCTACGG TGCCCCGCCA CAGTTCAGTT TTGGCTACGG
 GCGTCCACCT CCACCGCCAG ATCAGTTTGC CCTCCGGGG GTTCTCTCT CCACCAGCCA CTCGCGGGC AGCACCTCTG
 GCTTCCAC CGCTCCGTC TCAGGCTGCC CGGACATGA GCAAGCCCC GANAGCTCAG CCAGANTTCC CCTATGGTCA
 GTATGCAGGT TACGGGCAGG ACTGAGTGG CTTCGACA

SEQ ID NO:2297: (Length of Sequence = 306 Nucleotides)

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COGATGGTGA AGTGGTAAGA GGTCGATGGC CTGGGAGTTC ACTTTATTAT GAAGTAGAAA TTCTGAGNCA CGACAGCACC
TCCCAGNTTT AACTGTATAA GTATAAAGAT GGAACAGAGC TTGANTTGAA AGAGAATGAT ATTAAGNCTT TAACTTCCTT
TAGGCAAAGG AAAGGTGGCT CAACTTCCAG TTCCCTTCC AGACGCCGAG GGAGTCGATC AAGGTCAAGC TCCGATCCC
CCGGTCGACC ACCTAAAAGT GCCCGCCGAT CTGCTTCGTC TTTCCACCA GGGCGACATT AA

SEQ ID NO:2283: (Length of Sequence = 314 Nucleotides)

GAAAAAGTGG AAGTCATCAC CGGGGAGGAG GCGGAGAGCA ATGTGTTACA GATGCAGTGC AAGCTGTTTG TTTTGACAA
GACCTCACAG TCCTGGGTGG AGAGAGGCCG GGGGCTGCTC AGACTCAATG ACATGGCGTC CACCGATGAC GGCACACTAC
AGTCCCGACT AGTGATGCGG ACCCAGGGGA GCCTGCGACT GATCCTCAAC ACCAAGCTGT GGGCCGAGAT GCAGATCGAC
AAGGCCAGCG AGAAGGAGCA TTGCGATCAC AGCCATGGAC AACGAGGACC AGGGCGTGAA GGTCTTCCTG ATCT

SEQ ID NO:2284: (Length of Sequence = 262 Nucleotides)

GGCGTGACAC ACGCGCCCGG CCTGTGGGAG CATTTTAAAA TCTGATTCCT TTCCCCCTGA AGTTTCGGTT CAACCCCTNN
CTGTGGTCAG GTTGATTNCT TTAATTGCTA AAACAAGTCA AAATTCAATA TCCATGGCAG CTGACAAATC AGACTTTGGC
ATATAAAGTA AAGGGTTTAT TTTTCCATTC CTCTGTAAAT GGTTGTGINT TCACTTATTT ATAGTGCTAT GAAGCTGGTC
ACCTGGGAGA ATGGCATAAC TG

SEQ ID NO:2285: (Length of Sequence = 193 Nucleotides)

GTGAGACACA GTCITGCTCT GCTGCCAGG CTGGAGGGCA GTGTCTCGAT CTTGACTCAC TGCAGCTGAT GCCCCCTGGG
TTCAAGCGNT TTTCCACCT CAGCCTCCAA GCAGCTGGGA TTACAAACAT GNACCACCAC GGCTGGGTAA TTTTGTGTC
TTTAGTAGAG ACGGGGNTTT GCCANGTTGG CCA

SEQ ID NO:2287: (Length of Sequence = 342 Nucleotides)

AGGCTGGAGT GCAGTGGCGC AATCTTGGCT CGCTGCAAGA TCTGCCTCCC AGGTTACAC CATTCTCCCG CCTCAGCCTC
CCAAGTGGCT GGGACCACAG GCACCCACCA CGCCTGGCTA ATTTTTTTTG TATTTTTAGT AGAGACGGGG TTTACCATTG
TTAGCCAGGA TGGTCTCAAT CTCCTGACCT TGTGATCCGC CCGCCTCGGC CTCCCAAAGT GCTGGGATTA CAGGCGTGAN
CACTTGCGCC CGGCCTTCAC CTGTTAGTTT TTCAAGAGGT GTTGTGTCATG TCCACTGTGA TAGTTATTT GTGTGTCAA
CTGACTGGGC CACGGGGTGC CC

SEQ ID NO:2288: (Length of Sequence = 343 Nucleotides)

TTTTTATGT AATGAAATTT TAAAAGGCAG TTACATTAGT TACACATATA CACAACCGAC TTAATAACTG TTAGTCATAG
AGAACATTCA AGAAATACAA ATGATTATC CACAGCACAG TTCACATCCA TAAGAAGAAA GAGAAATGGT TAAGTACTTA
AACTGTCCAC TGACACCTGC TTATGAAATC TTTTCCCTTC TTTCTTTTTT TAAAGGAAAC TGAGATTGTT AGATGAAGCA
AGCCGTCTG CTCCCGACA GCCTGTGAAA CCTCCATTTT GCCACTTTCA AGGTCAGTGC CCCACAGACC CTGGGCTGTT
GTTGACCATA AACTAGCTT TGG

SEQ ID NO:2289: (Length of Sequence = 160 Nucleotides)

CGGGCCGCAA AGCTCAGTCT CTGGCGGTCC AGGCCCTGGT GGCTCTTGAT GATCAGGTCC ACGGCGGCTG CCACAGNTC
CTTAGGCC TTAGCGGCA NAGCGNTCC AGCACCTGT TGTGTCCTAT GTCCGTNAAC TGCTGCACGA AGAAGCATAT

SEQ ID NO:2290: (Length of Sequence = 310 Nucleotides)

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TATTACACAA CTGTTGTAA ATTCTAGTAA GATAAATTGA TACTAAAGAA AACAAACCCA GAAAGATCAA GTGACTTGGN
 TCACACAACA CAGGNATTAA GANGGAAATT AGTATTCTTT GTTGGAAATAT TTTCCATTG AATAGTTACA GGAAATTTA
 TTGTCATATT TTACAAATTA AATGTGTATT GGACATCATA GTGGGGAAAT

SEQ ID NO:2276: (Length of Sequence = 349 Nucleotides)

TCTCCAGGTC CTGGAGGCAA CGCAGAAAC AGAACANTGC AAATGCCAGC ATTTCCGCAG ATAAGCGTGG CCGCCAGCT
 GCAAACACCC CTGACATGCA GCGTCTGTT TAAATCTGG TTGCCCGCTG CAGCCAGTGG AGCTCAGAGG GCTGCCTGGC
 GGGTAAGGAC TCCAGGCACA CAGCAACAAG TGGCTGCCAC CTCAATCCC ACGTGGGAATA TGATGGGGTC CGAGCCAGCC
 AGTAACTCCA NGAGGCGTGT AGTGTGTAAAG TTCGGCCAGA GTTINCAGAT ATAATANCAT TGGCCCCACG ACGTAGACCT
 GTGGCGGCTC AGGGTTAAGA GACGGGAGC

SEQ ID NO:2277: (Length of Sequence = 182 Nucleotides)

CTTATATAG ACTCTGGTTC TAGAACTCG CCTGCAGCCG CTGGCTGGAC CAGCACACGC TGACGGGGCC GGACTATTTA
 CAGGCCCCATT GCGGGCTGTA CCTTGGCCAC CTNCGGCAC GGTGCTCAGC TGTCACENCA AAATAAGTTA GGGCCGGCCG
 GCGGGGGCGG GCGGGGACG GG

SEQ ID NO:2278: (Length of Sequence = 276 Nucleotides)

GTATTATTTT CCCCAAATGA AGCAAAGCAA GTACTGGGGC GGAGTCATCA GAAATACCTT GGGAGGTGGT GGGGAGGGGA
 GTGGGAGCA TCAGGAAAA CCCATCTCAA CTCAGCCTC TCAGGGGTG CCACTGGAAA NCTTTCGTT TTCCATCACT
 GGTGCAGAAA GAACCTCCCC AGGAATGGCC AGTGGCCTTT CCGCGTAAC AAGGNOGCAC GCTCAGAGCA GTCTTCTCTC
 TGGGCTGGGT GGACGGGAG GCGGAAGGA AAGCCT

SEQ ID NO:2279: (Length of Sequence = 193 Nucleotides)

TGCACCCATG GCCCCCTCA GAGCCCCAGG GCCCCTGAGC AAGCAGGCT CTGGCAGCAG CCAGCCCATG GAGGTGCAGG
 AAGGCTATGG CTTTGGG : GGAGATGATC CTTACTCAAG TGCAGAGCCC CATGTGTGAG GTGTGAAACG GTCCCGCTCA
 GGTGAGGGCG AGGTGA : CCTATGCGC AAG

SEQ ID NO:2280: (Length of Sequence = 401 Nucleotides)

GTGATTTTCC TGCTCCGTC TCCTGAGTAG CTGGGATTAC AGGTGCCAAC CACCACGCC AGCTAATTTT TGTAGTTTTA
 GTGGAGACGG TTTGCCCATG TTGCCAGGC TGGTCTGAA CTCCTGACCT CAGGTGATCC ATTCCCTCG GTCTCCCAA
 GTGCTGGAAT TACAGGCATG ACCCATTGCG CCGGCCCCA CTGTTTCTT TCTAATCGAG TGAGAAAATG GTCAATTTT
 CTGTCAACAA AATTCATGAG GCTCTTTGTA CGCACAGGAC TTCAGGCTT TCTCTCAACA ATCGCCAAAG CTGGAGGCAT
 CCACAATGGA GNAACAACCT GGGGGTTTTG AAAAAACAGG GAATGTTCC AGAATTNTTC TTCAAGAGTA TTTACATTTT
 T

SEQ ID NO:2281: (Length of Sequence = 217 Nucleotides)

AGCAGGGGA TTGTCCAAGG GTCTCCGGC GCCCAGGGCA GTGGTGGTGG CAGCACGAGT GCCACTATG CAGTCAACAG
 CCAGTTCACN ATGGGGGGCC CGCCATCTC CATGGCGTGG CCAATGTCCA TCCGACCAA CACCATGCAC TACGGGAGCT
 AGGGGCCCGN CCCGCGNAAC TNACAGCACC AGGAAACCAA ATGNATGTCC CTGCCCG

SEQ ID NO:2282: (Length of Sequence = 302 Nucleotides)

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CTTCTCTCTC CTGTTACAC AGTATTTCGAT TATTTCATG GCTACTTTCA GAGGATCAGC TAGAGGCTGA TGTGTTGTTT
CAATGGTTAT ATTATTTATG AACTGAGAGT AGAAGAAAAA TTTGAGAGCA GGTTTTTGA AAAAATGAAT TTAGACAAAT
ATTTAGTAAC TGTATGATAT ATAACCCCC N

SEQ ID NO:2269: (Length of Sequence = 237 Nucleotides)

TAGAAGCATT TTTTAAACAA CACTCAACTT TGTGAACCCC TGAAGATTTT TTGACCGTTC CAAGTCTTAA TGCCACACCA
CTATTCAGC GAATTTATGC TACAACGGT AACAAATGACC AGAAGCCTGA AGAATTAAAA TGCCAACACC AAACCTTTCC
NTACCAGCTC TGGNCTATAT TGCTCCCATG CATTTAATAT ATTATNNGT TTTATANCCA CTCTAAATA TTCTCAG

SEQ ID NO:2270: (Length of Sequence = 223 Nucleotides)

AAAGGTTAAG GAATTCCTT TATTTTTTAC AAATTAAGAC TATGCAGATT TCATATATTT CTGAATCAAA AACACCTTTG
TCTTCACAGT ATGAGTTAGA ATGCAGCCTG AGCTGAAAAT CAAGAACTA GAAAAGAAAG TGGTAGAGAT AACTATATTA
AAAACTGTT AGGTATTTCC TTTAAAAGTA GGTGTTTTTT TTTTTTNCC NCTTTTTTT TTT

SEQ ID NO:2271: (Length of Sequence = 363 Nucleotides)

TTTGATGGGT GAGGCTGGTA GAGCCACTGG GAGAATGTGG GGCAGTGAGG GGAGGGACAT CTTCTAGCA TCACCAGCAT
CCTGAGCTTT GTCTGTGTT GGGAGTCCA CAAGGGCTGG TGCAAGNTT AGCAGCTGCT ACTGAACCC TAATCCCTGG
GTGGATGTGG TCTCTGTAA CTTAAGAGCA AATGTTTGIN ATGACATGCA CGGGTGGGCA GAGGTGAAA AGAACAGGGG
TCTACGGAGG AGCCAGGCCA GCCACGTGAG ACCCTTCTTT CTAAGTTGGC TTCTTGCCA TTCTGGGGA TTNGGGGAAA
GAACGACAGA ACTTACCTTC CATCTTCCTT CTCACAAGCA GTG

SEQ ID NO:2272: (Length of Sequence = 150 Nucleotides)

CTCCCCCTGT AATCCCAGCG CTTGGGAGG CCGAGGCGGG GGGATCACGA GGTCAAGAGA TCGAGACCAT CCTGGCCAAC
ATGGTGAAAC CCCGTCTCTA ATAAAAATAC AAAAATTAGC CGGGCATGGT GACGTGCACC TGTAGTCCCT

SEQ ID NO:2273: (Length of Sequence = 330 Nucleotides)

TATATTATGT TAATAAAATC ATGTATAAGC AAAAGACCTA TGAAAGTATA AAACAGACCA ATGGATTTTA GTATAAAAGT
ACAAAACGTT CATTGAGGTG GGITCAGTTT TCCCACAAA ACTAACCCTT AAGAACTAC CACTTATCAA GTTTTGGTAT
AAGGTATAAT ATGAAAGANG AAAATCCATA ATTATTTGAA AAACACGNTT TAAATACCTT CCTTTTTTCC TACTACATAT
CTCTATTAGG CTGGGTTTC TTCACAATA ATTGAATACA AAAACAAATA TGAGNATTA GCTGTAATCT ATTAATCCCG
ACATTACAGG

SEQ ID NO:2274: (Length of Sequence = 372 Nucleotides)

AAAAAGCCAG TTGCAGTGGT ATATGCCTAT TGTCCAGCT AATCAGGAGG CTGAGATGGG AGGATAGCTT GAGCCCAAGA
GTTTGCGACT GGGCCTGGG AACATAGCAA GACCCTATCT CTAAATCAAT CAATCAATCA AACAGTGGTA TGCCACCCAG
AATAAGTATC TTTTTTGAAG TAAAAACAA AAAGCGAAT GGAACAACA GGTCTGCTAG TGGTGGCTGT CTGTCACTGA
CAATGAGGTC TCTGCAGAGC CGTCCCTAC CCINCCCAAC CCCCTAGACA TCAGGTCCCT TTCTAGGAA AATGAGAGCA
CAGACCTAGG NCCATGGNCT CCCAACTTT TTCTTCTCTT CACTACAGAT TC

SEQ ID NO:2275: (Length of Sequence = 370 Nucleotides)

CTTATTCTTT TCCTGAGGAT GTTGGTTTAT TATGGATTGT CTTAAGCAT CACTTGGAAA CGCTACAAAT AATGCAGCTA
AATGTTAAG CAATTAGGAA ATAGGAATTT TTAAATACAG AATTTTGCAC TGCAGAGTGT TTACAAGTAT TAAAAGATTG

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CTGTCAAAAA TGTATTATAT CAATAATTTT ATCAGCAGCA TTTAAGAAAT AAGAAATCAT TAGACAATAG AAGACAAACA
 TGGTAATGCA GTCAGGCCAG CACACAATAC ACGTTTTTCA TCACACACTG TAACCTGAAT CCTGGGCAAT TTCCTAGAGG
 TATTAACATC ATACCTTATT AAGAATTATT GGGCCCNAGG AGTNGGGGGG TGGGGGGGTT GCAATCTGTC CAATCAACAT
 CTGGCTCTTA CTTTCTCCCN GTAGTATTAC ATTGTATATA TATTCTTATA GGAAACAACT CAACTCCATG TTTATAAAG
 CACCATACGG TTTTCCATC CTGTACCA

SEQ ID NO:2263: (Length of Sequence = 352 Nucleotides)

CCCCAAAAGT TGACATGGTC AATGAAGAAA TAGGCAACA GCAAAAAGTT GCAGTCATAC ACCAAATGAA AGAAGATCAA
 AGCAAAATCC CTGAAGGAAT CCAAGTTGAC TCTGACGGGC TAATCACCAT AACAACTCCC ANTAACCTTG CCAAGCTCAG
 TGTTCGAGCC ATGCCCTTC CAGAAGAAGT CCCCCAGNTT CTGGAAGAAA ATAGTGANIT GATTCGTTCT ATGGAGCAGT
 TGACATCCTC TTTGAATNAG GGTGAAAATA CTCACATGAT TCATCAGAAG ACCCINNGGA AAATTTNGGA ATTCAAAGGA
 AAACTTTNG CAACANCTAA CAGGGNGNTG AT

SEQ ID NO:2264: (Length of Sequence = 381 Nucleotides)

GCTTACAGTC TAGAACAAGC TTTTCCAGCC CACAGCCCAG GATGGCTTTG AATGTGGCCC AACACAAATT CATAACTTT
 CCTAAAACAT TATGAGATCT TTTGTGATT TGTGTTTTAG TTCATCAGCT ATCATTAGTG TTAGTGTATT TTGTGTGTGG
 CCCAAGATAA TTCTTCCAAT GTGGCCCAGG GAAGCAAAAA GATTGGACAC CCTGGTCTA GAAGGAAAGG CAAATATTAA
 ATAACCTCAG AAAGTGATAT TACAAATTGT GGTGAGTTAT AAACACACTA TCAGGTGTTA TAAAGGAAGT GAAGGAAGTG
 GTGAGGAAAT TCTTATCAGG GNAGTGATAT TTNANTGAAG GGCCTTAGGG GATGAGTAGG G

SEQ ID NO:2265: (Length of Sequence = 301 Nucleotides)

CACCTCTCCT CCATCTGCC TTTCCACAGC AGTCAGTCTG GTCCAGCCA CCATCATCTG TCACCAGAC TACCATAGCC
 ATCTCCTAAC TGGTCTCCCT ACTTGCCGTC TTTATCTGTC ACACAGCAGC CTGAGTTTAT ACACACAGT GCATTCATTC
 ATATTTTGCT TAAACTGTT CAATGGCTTC CCATGGAAT TGGGAGTCTG GATATCTTCA CAAGTGTGTN GCATGGCCCA
 GGACCAATCT GGACACCCCT NCTGTTTGT NCATNCATGC CTGCAACCAC TTTTGGCCT T

SEQ ID NO:2266: (Length of Sequence = 360 Nucleotides)

CGCTGCAATG CCCACAACA ACACAACTTT ATTCTCTCC CAAACATCTG TCAGGCCTGG CCTTCTGAG CAGGAGCTGA
 GCAGGAACAG GGCCTGGCTG CCTCTCCTCT GCCACAGCTC TGACCTGGG AAGGCTGGAA GCTGGCATCG TAATGGATGG
 GGGAGTGGGT GGAGGATCTG AGGCTCCCTT GGTAGGTTT CGATACCTTG GACAGGTGGG CCTCATCTG ACTTAGAACT
 CGGGGAGGGG CCACTCTTCC TTCCCTTCT TCCAGCAGCA GCTCCACCAC CCTCCACCTT CTGTCTCGA CATGTGTCNCC
 AGAAAAACCA GCCATGAGGG ACCGCTNTGA GGAAGGGTCT

SEQ ID NO:2267: (Length of Sequence = 391 Nucleotides)

GATGGAGTCT CGCTCTGCA CCCAGGCTGG AGTGCACTGG CAAAATCTCG GCTCCGGACC CCCCCAAGAC ACATATGACC
 CACCACCCCA TCTCTGACCA TGAGGCCACC CTGAGGTGCT GGGCCCTGGG CTCTTACCTT GCGGAGATCA CACTGACCTG
 GCAGCGGGAT GGGGAGGACC AGACCCAGGA CACGGAGCTC GTGGAGACCA GGCTGCAGG GGATGGAACC TTCCAGAGT
 GGGCGGCTGT GGTGGTGCCT TCTGGAGAGG AGCAGAGATA CACCTGCCAT GTGCAGCATG AGGGTCTNCC CAAGNCCCTC
 ACCCTGAGAA TGGGAGCTTG TCTTCCAGC CCACCATTC CCATGTGGG CATNATTGCT GGNCTGGTTC T

SEQ ID NO:2268: (Length of Sequence = 191 Nucleotides)

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TTTTTTTTT TAACTGTAAA TGCTATTTTA TTTTAAACAT TTTTGTITAC AAAAAAAAAA AAAATCAATG ATTGGTACCT
 TTTTACACT CTCAGATTCC TGAATATGGA CAGATCTTCA AAGGGAGGAA GGAGTCTCA TATGAAATTT AAGATAGACT
 GTCTGAAGG TTGTGGGGTG GGGTTTTTIG TTGTGTTTTA ATTGCTTTT GTTTTAAGN CACAATAAAG CTAAATATGC
 AAGTCTCTGG GAGAGATCCC CTAAAGTTT CAGTCAAGGA GCATATCAGA GCACAGACAA GGNAGCCCCA GCCTGGTGCC
 CGCCGGCCCG TCCCGGCTGC CCAGNGTAT TTGGTAGCGC ATGGGTGAG A

SEQ ID NO:2257: (Length of Sequence = 372 Nucleotides)

AACTCTATGG CACTAATGTA TGATGGATTC ATTTCCAGAC TGTCGGCCAC GGAAGCACTT CTTCATGGCC TCTGCCCTGG
 ACAGCAGCCT GTCTCCGGG CTCCCATGT TTTTACCAGC TTCTGCTGAG TTTCTACAAT CTTGAGCTCT GCTGAGAATT
 CTTTCTCTTG AAATTTCTT ACCTAAAGCC CCAGCCCCCA AAAGAGCATG TCTCAGGAAC TCATTATGCC CTGAGTCAAC
 AAGAACTTGT TGATAAATGG CTAAAGTT TTTACAAGAA GTAACCTCCC TTGGTAAGGA GTAAATAATA GCTCTGGGAA
 TTTTCCAGAT AAAACTATTT CATTTCTCTG GTCAGTGGCC CCATGGGGAG AG

SEQ ID NO:2258: (Length of Sequence = 340 Nucleotides)

CTCAGCCTCC TGAGAACCTG GGATTCAGC CTCCGAGAA CCTGGGATTG CAGGCACCTG CTGCCATGCC CAGCGAAGAT
 TTTGATTTT TAGTGGAGAC GGGGTTTAC CATGTTGGCC AGGCGGGTCT CAAACTCCTG ACCTCGTGAT CCACCGCCT
 TGGCCCCCA AAGTGTCTGG ATTACAGGGG TGAGACACCA CGCTGGCCT TTATATATAT TTTNAGAGAG GGGGTCTCAT
 TTNTTGGCC AGGCTGGTCT TGAACCTCTG GGCTCAAGCA ATCTTCCCG CTCAGNCTCT CAAAGTCTG GGGATTACAG
 GCAATGAGCC NACCGTGNC

SEQ ID NO:2259: (Length of Sequence = 394 Nucleotides)

CCCCCAGAT CCCACTGTA GGAGAAGCC TCTGCTAACA TTTTCTCTAT CTGTATATCC TCTGGGAATG AGACCCACTA
 AAGGGCTAGA GTGTGCTCA GTGTGAATTC CTCTTCTCG ACTCCATCTT CGCGGTAGCT GGGACCGCG TTCAGTCGCC
 AATATGCAGC TCTTGTCCG CGCCAGGAG CTACACACCT TCGAGGTGAC CGGCCAGGAA ACGGTGCGCC AGATCAAGGC
 TCATGTAGCC TCACTGGAGG GCATTCGCC GGAAGATCAA GTCTGTCTCC TGGCAGGCGC GNCCTGGGA GGATGAGGCC
 ACTCTNGGCC AGTNGGGGT GGAGGCCCT ACTACCTGG AAGTAGCAAG GCCCATGCT TTAGAGGTAA AGTC

SEQ ID NO:2260: (Length of Sequence = 359 Nucleotides)

TTTTTTTTT AGATCTGAGA TTCTTTAAT CAGAAGCAG TGCGTCCAC AGTGTGCTCT TCAAGCCCCA AAGGGCAGC
 CTCTAGGACT GCNTCTTAG AGCGAGGCTC GGGCTCTTG TAAAAAGCA TTTGCTTGAT TTTATTTAA CAATGGTGAA
 TCTTCAAGGT GCCAGTCTAC ATGCCAACA GTCTCCAGG NTTCAGGNC ACAGTCACCG TCACTCAGAG ACTGCCTCAT
 TINGCAAGAG AGAAAAACAG TGACCACCAC AGAGGCGAGG GAGTGACAAA GCTTGTAGGC TAATGCTGCA AAAGCCGCTA
 GAAACTGGGG GCCACACACA AGNGCCANC AGGTGCGCC

SEQ ID NO:2261: (Length of Sequence = 360 Nucleotides)

TTTTTTTTT GAGACAGAGT CTGCTCTGT CGCCAGGTTG GAATGCAGTG GTGTGATCTC AGCTCACTGC AACCTCGCC
 TCCCGGCTC AAGCAATTCC TCTGCCTCAG CCTCCTGAGT TGCTGGGACC ACAGGCGCAC GCACCAGCC AGGCTAATTT
 TTGATTTTT AGTAGAGACG GGGTGTACC ATATTGGCCA GGCTGTCTC TTCGAAATCT TAAATCCAA CATTTCTATT
 CTCTAGATC CCTGTCTCAG GCGAATCCTT TCATCTTCC CTTATAGCTC ATCAGCATGT AAGTGTCTG ACATCTCTCT
 TCTCCTCCC TATTAGCTCT CTACTCTCIN CANTTACAG

SEQ ID NO:2262: (Length of Sequence = 348 Nucleotides)

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SEQ ID NO:2250: (Length of Sequence = 275 Nucleotides)

TGCCAAATAT ATATATCTGA ACATAGTGAA AAAGTAACAT TTAAATCAG TCAAATTATT TTAAAAATTC CTTTGCTTAA
TAGCCATTAC TTACTACCT TTTGTTTTG TTTTNCCTT CAACTACTAG AGTACTGTAC TTTTGCTTTC ATTCCTTCTA
TACATTCTGC CTTTCATCCTT AAATTGTTCA ACTCGATAGT GCTAATATTG GTAGATAATC TACGCTAGCT GCTGTTTCTT
GTACAGAAGT TGGTTGATAT CGCTGATTCA CTTTT

SEQ ID NO:2251: (Length of Sequence = 426 Nucleotides)

GGAATAAGGA GATGAGAGCA TGCTCTGCCA ACTGGCTGGG ACCTGAATGT GCTAGGCAAG TNCCTACTACA TCAGCTCAAG
AACATAAACA AAAATGTAAAT TTAAAAACA GATGGTTTAA AAAAAATCT GATAAAAATT ACCTATCCCT CTCCCTTGCT
GTGAATAAT TTAAATAATT TATTCTAGAT GTAAAAATA TAATACAAA AAGTTTGTTT AAAGACACCT GTGTCCTGTT
TGTTAAGTGT GCAGTCTGGG TCCCTTGGGG TGGAGGGAGC TGGCCAAGGA ATGGCATTGT GCAGAGGCAT ACCGGGAAGC
TCTCTGGATG CAACCCACC TCTACCGCTT GGCAGTCAAT GACCTTGGGC ATGATGTTT TCACTTCTC TGAGGGCTAG
GGCTTTGATT CTGAACATGG GGGGCT

SEQ ID NO:2252: (Length of Sequence = 315 Nucleotides)

GAAAAGATAA ACAAAATTAA TAGACCATTG GTGAGATTAA CCAAGACAAC AGGAAAGAAG ATCTTAATAA GCTCAATTAG
CAATGAAATG NGAGCTACTA CAACTGATAC CACAGAAATA CAAAAGATCA TTCAAGGCTA CTATGAACAC CTTACAGTGC
ACAACTAGA AAACATAGAG GAGATGGATA AATTCTGGA ATTTTAAGAN TAATACAATG GACTTTGGGG AATCAGGAGA
AAGGGTAAGA GTGGGGTGAG GGATAAAGA CTACACATTG CATACAGTGT ACACTTCTTG GGTGATGGGT GCGCC

SEQ ID NO:2253: (Length of Sequence = 335 Nucleotides)

AGATTATTTC TCATGTACAA AGCGGTACG CCACGGGACC ATATACGACA GTTGACAGAG GTCCTAGAAA AACGCATCTN
TCTAAAGGCA ACTCAGAAAG GTAAGGCAGG TGGACCCCTT CCCCCACCCC ACAACGCACA CAGAAATGAAA CGGAGAAAAA
GAGAGAAGCC AGTGGCCGGG CTGACCCAAG AGTCCCGGCC CTATGGGGTC TCCCAAGCCC CAGGGCACAG GTGGATATGG
CCTTGAAGAG AGAGCCCTGC CAGGGCTNAG GCCAGGTCTC TCACTGGCTG CAGGAATNGG TAAGGGGCTC AGGCCAAGGG
GAACACTTCA GGGG

SEQ ID NO:2254: (Length of Sequence = 380 Nucleotides)

GGAAGGCTCT GGAGAGGTTT CTGCAGGATT ACTTTGATGG CAATCTGAAG AGATACCTGA AGTCTGAACC TATCCCAGAG
AGCAATGATG GGCCTGTGAA GGTAGTGGTA GCAGAGAATT TTGATAAATA ATATACAATA ATCACAATCCA CTTTCCACCA
CCTACACAAA AAACATTTCA TACAGACTGC AGTACAGTGA TTTTITTTTA TGAACATAAA GGTCAAAATT GTTTCATTTT
CTCTTCTGCA GATTCTAAGT AAAAAATGAC AAAATATGCA TAGAGATGTT TGTAACCAA AAATAAATGT CTAGGGCCCC
GAACCATCTT GAATGGGACC CCTCCTCTCA GCCAAGGGCA TTCCAAAATT AACCTGCAAA

SEQ ID NO:2255: (Length of Sequence = 399 Nucleotides)

ATATAAAAAG TGTTTCTGTG ATTCTNCAGA GCCCAGGAGT CAGTGTGGT GGTGGAGGG ACCTGCCCCC ACTGGTTCAT
TTAACCTCTT GTCTCGGTGC CCTCAGAACC TCAGCCAGAA AGGCAAGGAG GAAATCAGAG CAGGAGCCTC ATACTCTTGG
TGATCTATTG ATTCTGTGAC CTCAGGGGTC ACATATAAGG TCAGTGTTC TCGTCCCCGC CGGATCTGCA CTGCCAACTG
GGATTGGGTT CGAACAGCTT CATAACATC TTCAGCATTT TGTACCATCT GCTCCCAAT GGCCAAAATC ACATCACCAG
GNGCAGACC CAGCCCGGTG TGCAGGGGAG CCCAGGATGA CTTTATGGGA TGAGTACANC ATGCTGAACA TCGGGNAAG

SEQ ID NO:2256: (Length of Sequence = 371 Nucleotides)

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ATATGTACTA CATTGGTGG AATACGCATG TACAATCTT CAAAAATAGT AAAGAGCAAA ACAAACAAAA AATAGTAGAA
GCACTGGAGA AATACACTAT GGCATAAAT AGTTACGGGT GGGATGTAC ATGGACCATA TCTACACTCT GTGGCAACCT
TCTTACCTGA CTCCAAAGGA TCAGATAATC AAACAGGAAA TTATGGTAGG AAATCAGAAA ATTGAAGTAT GCATTCATAT
CCTAAGCATT TTATTTTAGC TCAAAATATA AAATATTCAT CAGTTAGCCA AGCTTTGGGA TGAGAGATCA TAGCCTCCTC
TTTGATAGGN GTTCTTGTT TTCTTGATT CATGTTTCAG AG

SEQ ID NO:2245: (Length of Sequence = 333 Nucleotides)

AAGGATCTGA GCGAGTTCAG TGTCATTGTG GGCAACGGGG AGATTAAGCT GCCAGTGGAG ATCAGTGGGG CCATOGAGGA
GGAGTTCACT GTGGCCCGAC TCTACATCAG CAAAAACAAA TCAGAAGTCA AGTCTGTGGT CAAGCGGTGC CGGCAGCTGG
AGAACCTCCA GGTGGAGTNT CACCGCAAGA TGGAAAGTAC CGGCGGGGAG CTCTCATCCT NCCAGCTCCT CATCTCTCAG
CATGAGGCCA AGATCCGCTC GCTTACGGAA TACATGCAGA GCGTGGAGCT AAAGAAGCGG CACCTGGAAG AGTCTATGA
CTCCTTGAGC GAT

SEQ ID NO:2246: (Length of Sequence = 347 Nucleotides)

AACTAGCTT TGGTGGGAAC TCCCTACCC CTGCTCCCCA CAGGAAGGCA TTAATCTATT TATGAGGGAT CTACCTGCTA
TAACCCAAAC ACCCCACCAG CCCCCTCTC CCAACACCAC CACACTGGGG ATTAAATTTT AATGTGGGAT TTGGAGAGGA
CAAATATCCA AACCATAGCA GTCTTAAAGT ATTTAAATTA GAATTTAAAT TAAATTTTAA ATTACAGTAT TTAAATTAGA
ATCATTTGTG GAGTTTCTAA AAGGTATGCA TTCCTAGGCC CCTCTCAAGT TAGATTTATG GACACTGATC CCCAGTCTGG
AATTTTAAAA CAGCAAAATC TCATACT

SEQ ID NO:2247: (Length of Sequence = 357 Nucleotides)

CACAGGACAT GCTCCGTCAG CACAAGCACT CCAAGTCAA TCTGAAAAGC AGGCAGCAGC ATTGCAGGGG ACAGGTCCTC
CCCTGATCTG GGTGGTGGTC TTCTCCCACT TAAAGCACTA TATACAGGGG GAGGTCCAG GCTGGACATC TTTACCAGGG
GCTGGGAGAA AGCAGGCGT GCTCTGTGGT CTCAGAGTCT TCCTGGGCT CTTTGGAAAC TGACAGAACA TGACCTCAGT
CCCAGCCAGC GAGTGGCAGA GAGGACTTTG TACTTGGCTG CAATAAACA TGCCCTTCTT CGCAGAGACA CGAACATCT
CGTCTCTACC AGAGGCCTGT GAGACATCAG CTCAGGA

SEQ ID NO:2248: (Length of Sequence = 327 Nucleotides)

TTCTCTTAT TAATGGCTAG AAAGTCAGGT TCACCCAGG AAGTCACTGA GGGGCCACAG CATTGAAGGG TATGGGGTTT
GGAGAGATAG GAGCAGGACC CACCACTCAC GTCCAGAACC CAGGGGGCAC ACCTGGTCCA AGAGGTGGAG GCATTGGTCA
CTGGAGTCAC GAGGGTCAGG ACAGGCACTG AGAGGCTGAG GGAGTNTGG TCCGGAGGGA GGCAGTCAGG GGCTAGGGCT
GGGAGTCGTA GCCAGTNTGC AGGGCCTGGG AGCCCCAGG CTGATGCCCT GGGCTGGCGT AGTACTCCAC CACCTGCCGT
GGCACCT

SEQ ID NO:2249: (Length of Sequence = 404 Nucleotides)

ATTTTAAATT TAGGTTTGT TTATTTAAGT TTAATGTTAA TTCCATGCTG TGTTTCAGTA AGACAATAC AGATTCTGTA
TCTGTGGCTC CAGTCAGATA TCCAGTAGTA CAAATTAGCT TCAAGTTACA CATACTGAAC AAAAGAGGTT GAGCGAGCGA
AGGAGGGGAG GAGTGAGGGG AAGGAGGTAG GGGGAGGGG AAGGAGAAGA AACAAAAGNN TTGAACAGGC ATGCAGGCTT
TTCCATACCA CCTTCAACGC TAACCTGCTT CAGTGGGAGA GTAAAGTAGG CAAGANTGAG CAGCCACGGG ATTGTTGAAC
TGTTACCCAG CACCATGCTT TTCAGCAACA TTTTCAGCG AGTTTGGGAA CATTTTTTTA CCAGCAAAAA CCATTACACC
GAGT

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ATTTAAGGCT GTACTTAACT AATTTGGGCT GAGGATGAAT ATATCAGCCA CAGCACATTA AAGAATGAGC CAAGGATTTG
 TCATGGTTGG TCACTTTTAA AAGTATTTGA TTACTGCAAC TGGAGAATGA AAAGTGTATA TTGGTGACGC CAACCTCAGT
 TTCTGAGCAC TCCTGCTCTG TGGTGAGAAT CAGACAAAAA TTCATCGGGG TGAATAAAAA AAGGCATTAC CTGATTCACA
 CCTTGTCTT GCTAGCCCTC TTCCATTCAT TTCTCACACA GCACTTTGCT CTGTAAATC CTCTCTCTGT CTCAGACCAT
 TGCTTGCCCC TTCAAAGGGT ATGGTTCAGG CTCCTTTCAA GACATTTGG

SEQ ID NO:2239: (Length of Sequence = 399 Nucleotides)

TTAATATAAT ATTCAAGTCT AGCATTGCT ATTTACAACA AATAAATATT GGGCTCCCC AATCAGTAAA CAAACATTTT
 TTTTTCTTT TTGCTTTTAA TACAAATATT CAATCACCCC ACCCCCACCC CAAATCCTCC TTCTCACTA ACCCCGCTCT
 TGCATGGTCT CGTAAAGCCC AGGACGCAGT GGTAATGGC ACTTGCACTG GCATGAGATT CAACATOGAT GGGACTCAGC
 TGGGACTGTC CTCACTCACC GGGTGCAGAG TCTGGTCCAT GAAGAGGGNT TCTNTCTCTG CTCCCAGGGG AGGCTGGGG
 TAAGCGGTGG GTGAGACTCC CTCACTCTCA GTTGCNCTG ATGATGGAAT CTPTNGTGCA GCCTGAGAAA GGCTAGAGT

SEQ ID NO:2240: (Length of Sequence = 388 Nucleotides)

TTTTCAGAAT TCATCTCTGA CTTAATGGC TTAAGCAAGA ACATGGTTTC CGTGGCTCCC CCTGGACTGA ATGCTGGAGG
 ATATATACTT CACAGTCTGA GGCTGGTCC CAGGAAGTGC AATCTAACAG GATGGCAAGT GGTTTTGAAA CATATAGATT
 TTCAGGATGG AAGTTTGATT CTTCAAGTGG TGACTCATCC GTGGAAAATA AATGGTTTAG CACCTAAATC TGTATATTCC
 CATCAGTGGC TTGGCTGACT CAGTTGTAAA TAGGGTACCC TCCATCTGTC TCCCACCCAT ATGCTCCACT GTCCCAGGG
 CCTCAGTGCC TGANCCCTAG GGGGATTGGA GTTGGCTGCT GGATTCAATT CCGCAAGCA GGCTGCA

SEQ ID NO:2241: (Length of Sequence = 377 Nucleotides)

CTCCATTTTG TCCTAGTTAC TTTAAGGTA TAAGCTGAAG TCATTGATTT GAGATGTTTC TNCCTTTCTA ATATAGGTGT
 TTAATGGTAC ATATTCTCC CTAAGTACTG CTTAGTGGC ATCCTGCAAA TTCGACATA CTGTGGTTCA TTTAATTCA
 TTACAAAATA CTTCTTAATT TCCTTTTGA TTCTCTCTT AATTCATGGG TTACTTAGAA TTGTGTTATT TAATTINCAA
 GTACTTGGCG ATTTATCTCT CTCGTATT CATGTCTAAT TTAATCCAG TGTGCTCTGA GAATATATTT NGATATCAAT
 AAAGCTACTC CAGCTACCTT TTGATTAAAT TTATCACAGT ATATCTTTTT CTATCCT

SEQ ID NO:2242: (Length of Sequence = 381 Nucleotides)

CCCACATTAA CCAAACACAC ACACACATGA CAACTCTAA GTCTCCAGAC AGACACCTC AAATAGGCAC TTGGTGTTTT
 CAGCTGGGGG CTGGAGAGAT CTGGGGCTTT GGCTCCAAA GGNAGGAGCT GCTGTCCCCA GAGAGGAGAC AACAGCTTCT
 GGAGGCTCTG GGGACTCATT GGATGGGTAC TGGCTAGGTA GATGGGAAGG GGGCTGTTT AAAGAAGACC CCCACCCCC
 ACTGCCCAT TCACCACAAC AGTGACTTGC TGGAGTTT GTGCCCTGCG GATTCTGAA TATAGTGGAC AGGCATTCTT
 AAAGAGCGCA TCACTGAAGG GGCAGAGGCT NGCCTTAAA TGTGGGCTTT GCATGTTTIG G

SEQ ID NO:2243: (Length of Sequence = 359 Nucleotides)

ACCATTTATT AAATCAGACT GTTATCTTAA ACAGTTATGT AAGTTACATG TATGTTAAG TCAGAGTATT TCACATGGAA
 AAGTTTTTAA CTCCTATAGG CAAGCAAAAT CATATCACAC AATATATAAG TGGGAAGGGG ATACTGCTAA ACATTCAAAT
 AAGGCAAGTA TATAAAACCA ATAAACAAT AATGAAAAA TTCAAGCATT CCTTTAAGAG AATTCAACAC TACAAGCTAA
 ATGTACTTTC TGAGTGTATT CGTATAATCA AGGCAGTGT TCTCCTTTTA AAACATCAGG AAATGGAATA AGGCTCATT
 GTAGATACAG CTGCCCTCAA GATTCAATT TCAGTTTGC

SEQ ID NO:2244: (Length of Sequence = 362 Nucleotides)

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CCTGCCACTG AGGCAGGTGC GGCCCCAGGA CCATCACCAG GAATGCNAGG CCACCCTGGA CCAGAGGTAG GAGCCCAAGG
 TCCGGCCCTT GCTCTTTGAT TGTGGGCAGC CTCTGCCCT CTCTGGGTCT CAGTTGCCCC ATCTGCAGAG CGAGGAGGCC
 CGGGCTGGTT GGTCTTGAAG GCCCTTTTCC ATGCCGACAT CATGTCATC TAGGCCTGGG GTTCAGTTTC CTGTGGCTGG
 TGATGCTGTG GTTAAGTTTG CTGACCCCA GCAGCCCGAG GGACTGTCTG AGTCACAGCA CAGCCCCTAT TCGTGGCTG
 CTGGTGTGTG GGGTCAATTC CAGCAGATGA ATGT

SEQ ID NO:2233: (Length of Sequence = 414 Nucleotides)

CCCAAAGCCC GCAAGATGCA GGCCACTNCG ATTCCACCAA GATGGACTGT GTGTGGAGCA ACTGGAAAAG TCAGGCTATT
 GACCTGTGTG ATTGGCGGGA CATCAAGCAG ACGGGCATCG TGTTTGGGAG TTTCCTGCTG CTGCTCTTCT CCTTGACCCA
 GTTCAGCGTG GTGAGCGTCG TGGCCTACCT GGCCCTGGCC GCACCTCTCAG CCACCATCAG TTTCGCGATC TACAAGTCTG
 TTTTACAAGC AGTGCAGAAA ACOGACGAAG GCCACCCCTT CAAGGCCTAC TTGGAGCTTG AGATCANCTT TTCTCAGGAG
 CAGATTCAGA AGTACACGGA CTGCTCTGCA GTTCTACGTG AACAGCACAC TTAAGGAACT NAGGAGGCTC TTCCTTGTC
 AGGACCTGGT GGAT

SEQ ID NO:2234: (Length of Sequence = 394 Nucleotides)

ATAATCCGAG TGCTCCATCT TCAGTGCCAT CTGGACTUCC ACCAAGTGCA ACACCCTNCA NIGTGCCCTT TGGACCAGCA
 CCAACAGGAA TGTATCCCTC CGTGCCTCCC ACCGGACCAC CTCCAGGACC CCCAGCACCC TTTCCTCCTT COGGACCATC
 ATGTCCCCCA NCTGGTGGTC CTTATCCAGC CCCAACTGTG CCGGGCCCTG GCCCCACAGG GCATATCCTA CACCAAATAT
 GCCCTTNCA GAGCTACCCA GACCATATGG TGCACCACA GATCCAGCTG CAGNTGNTCC TTTAGGTCCA TGGGGATCCA
 TGTTTTNIGG ACCCTTGGGC GNCAGGAATN GGAGGGCAGT ATCCTACCCN GTAATATGGC NATATNCATN TNCA

SEQ ID NO:2235: (Length of Sequence = 376 Nucleotides)

CTGATATGAT GACAATAAAG GAGTATGCTG CTGCTGTTCC GCTTTGCGTC CTCGCTACAA ACGCCTGGTG GACAACATAT
 TCCCTGAAGA TCCAAAAGAT GGCCCTTGTA AAACGTATAT GGAGAAATTG ACATTTTATG CAGTATCTGC TCCAGAGAAA
 CTGGATCGAA TTGGTTCTTA CTTGGCAGAA AGGTTGAGCA GGGATGTTGT CAGACATCGT TCTGGGTATG TTTTGATTGC
 TATGGAGGCA CTGGACCAAC TTCTCATGGC TTGCCATTCT CAAAGCATTG AGCCATTGTG AGAAAGCTTT CTTCATATGG
 TGGCAAAGCT GCTGGAATCG GGGGAACCAA AGCTTCAAGT TCTTGAACA AATTCT

SEQ ID NO:2236: (Length of Sequence = 399 Nucleotides)

TGGCAAGAAC ACTGAAACCC AGCCAACCTC TCCTCAGCTA GGGACCAAAA CCTTTTGTGTC TGTAGTCCTT CCGAGGTTGG
 AGACTCTTCT GCAGCCAAGG AAAAGGTGCG GGAGACATGC GGAGACTCCG AGGTGGAGGA GGAGTCCCCA GGAAAGCGCC
 TGGACGCAAG TCTACCAAC GGCTTTGGGG GTGCGAGGAG CGAGCAGGAG CCGGGCGGCG GCCTNGGGAG GAAGGCCACA
 CCCCAGCAGC GCTGTGCTC CGAGTCCAGC ATCTCCTTCA GCAACAGCCC GCTCTGCGAC TCGAGCTTTA ATGCGCCCAA
 ATNIGGGCGG GGGCAAACCG GCTCTTGTG GACGGCACAC GCTTGGAGGA CCNCACTNAG CTGATCTTCT GCATCGAGA

SEQ ID NO:2237: (Length of Sequence = 234 Nucleotides)

AAANTACTAA CATTTTTAAT ACAGTCTGAT CAGATCAATT CACATCACAA GGTCAACCNG GGCTTGCTCA CATGTGNCAC
 AACTGAGGNA CACAATGTCC CTACCTGCCG GCTGTCCCAC CTTCCTGGTT CCCAACAGCA TTGAAACCCC CTACTTCCCT
 GACCAGACTG GCATTTTTTA AAATTTTGCA TAAACTATT TCTTCCATAG NCTTCAAACA ATCAACTAGC CAAG

SEQ ID NO:2238: (Length of Sequence = 369 Nucleotides)

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SEQ ID NO:2226: (Length of Sequence = 264 Nucleotides)

GTACCTGCTC CCTGCCGGCA CCTTINTTGG TGGATATTTA GCTGCCCTCT ACAGTGGTTA TAACATTGAA CAGATCATGT
 ACCTAGGCTC GGGTTTGTC TGTGTGGGTG CCTTGGCTGG CCTCTCCACC CAGGGAACAG CACGTCTTGG CAATGCACTG
 GGCATGATTG GGGTTGCTGG AGGACTGGCA GCCACCCTCG GAGTCCCTAAA ACCGGGCCCA GAATTACTAG CTCAGATGTC
 TGGAGCGATG GCTTTGGGTG GTAC

SEQ ID NO:2227: (Length of Sequence = 402 Nucleotides)

AGAGGATTGG GGCACCTGGG CAGGGGCGCT GGCACATTCC TCAGATCTCG GCATGTCATC CTGGAAGTAC TCAGCCTGGC
 GGTACTGCCA CAGACGCAGG TTCCCGTCCC ACGAAGTCTG GACAATCTTC TCTTCAAAGG GGTGCCAACT GACGTACGCG
 ACACAGGCCT TGTGGTTGGT CAGCTTCTTC ACAATGTGGC CACTTAGAAG GTCGTACACA ACCACTTTGC CAGTGGAGCA
 GCCACTGTAG ATGAAGTCTT GGCCAGTCTT ATGAATGGGG GAGAACCAGC AGCGGATGAG GGTGTGCAGC ACTCCGTGGC
 CCGGTAGGT CATCAAGGAG CTGTCCCCTG GGAGCTTCAG TTTCGGCAG GCTTTTTCG GGCACCTTCT GCCACGATA
 GT

SEQ ID NO:2228: (Length of Sequence = 394 Nucleotides)

TTTAAAGTGG AAACAATGTT TTTAAGAGGT GATATAAAGA AATGCCCCCA CTGTAATCCC TACCATATGT TGATTCTATG
 TGGTGGGAGG GAGGGGAGAA TGATTCCTTT TTCTAGAATC AGAGAATTGT GAAAGTATCA AGAAAGATAA TAACAGAAAG
 CATGAAATAG AGTTGTGCTT TGAAGATGAA TTGGATGAAA TINTTATGTG AAGAGGAGTT TTCAAAGTT GCAGACCCAG
 GATTCTGGC CAGAAGCATG AAAACGTTTC TTCTTACTG TTCTTAGGAC CTAGGCAGCA TTCTTCCAT GTCTGCAACA
 ACATAAGAAA CAACAGCCA AACAGCAGCA GCAACATTCA TCTGCTTGG ATCCCATGGA CAGTCATGGT GTCT

SEQ ID NO:2229: (Length of Sequence = 342 Nucleotides)

TTTTTTTAG GATGATTGAG TGTTCCTTAA AAAATAAAAA CCCACAAAAA AAGCCAGAAC ACCCTACCCA ACCCAGCCCA
 GTGTAACAGG TTAGCCATTA ACACAGAATA AAGAAGGTCC CAGCCACACA CGTCATTACT CGGCAGAGGG TGTCCAGCCT
 GGTCCGCCGA CGTCACAGTG GATGGCCCTG CGTGGCTGGG ACACAGACAG GGAGCAGGCA TGGCACCTGC GCCACGAGA
 GCAGCAAGGC TGAGCATGAC CACTGGAAAT AAATAAACAT GGTGCCGACA GCATCTTTGA ATTAGTAAGA CGTTAGCACA
 AAACAAAAAA GCACAACGAC TG

SEQ ID NO:2230: (Length of Sequence = 357 Nucleotides)

GTGGAATGCA GCCATCACAC AGTAGTTTCT GAGATTGCTT CGTCTAGGT TTTATGGGAA GATATTTCTT TTTCTACCAT
 AGGCTTCAAG GCGCTCTAAT ATCCGCTTGG AAATACTACA AAAACAGTGT TTCAAACCTG CTCTATCAAA AGGAAGGATC
 CACACTGIGA GTTGAATTCA CACATCACAA AGAAATCTCT GAGAATCTT CTGTCTGGGT TTATAGGAAG AAATCCCGTT
 TCCAACGAAG GCCTCAAAGC GGTCCATATA TCCACTTGCA GATTCTACAG AAACAATGTT TCCAACTGC TCTATCAAGA
 GGAATGTTGC ACTCGGTGAG TTGAATGCAC ACATCAC

SEQ ID NO:2231: (Length of Sequence = 304 Nucleotides)

AAGAGACGAG GTCTCACTTT NINGGCCAGG TTGGTCTCAA ACCCCTGGTC ACAACAATC CTCCAGCCTC ANCTCCCAA
 AGTGCTGGCA TTACAAGCAT GAGCCACCAT GCCAGCTTA AGGGGATAT TTTTATAGAG CATCTGCCCC TGGTCTGGA
 ATTCTCTGTA GATAATACAG TTAACAGATA TTCCCCTAAG TGATTAAGAA CCTTCCATT TGACTGATTT TNCAGAAAAG
 TTACCTATG TAACCTCAGT GGGTAGCACA ATGCCTGACA CATCTTTGNA GCTCAAATGT CTCT

SEQ ID NO:2232: (Length of Sequence = 354 Nucleotides)

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CTCCAGTGGC TTCTCCAGCC CGCACAGCGG GGAGCACCAT CAGTATCCCC TTCCCAAATN TCCTTCCCGA CTTTTCOAAG
GCTTCAGAAG CGGCCTCACC TCTNGCCAGA TAGTCCAGGT GATAAACTTT GTGATCGTGA AATTTTGTTT AAGACACTT

SEO ID NO:2220: (Length of Sequence = 343 Nucleotides)

CTGGCTAACA TGGTGAAATC CCGTCTCTAC TAAAAGTACA AAAAATTAGC TGGGCGTGGT GGTTGGGCACC TGTAGCCCCA
GCTACTTGGG AGGCTGAGGC AGGAGAATGG CGTGAGGCAA CAGTGACGCC TGGGCAACAG TGCACCTCCT CCATCTCTAC
CAGCGTCCCC TCCAGTCTGC ACGGGGCACT CCTCCTGGGC TTGACCTCTC TGTACCCACA GCTGGGGGCC AGGCAGCCCC
CCTCTATCCC TCCCAGCACC TACTACATCG NCTTNCACAT CCTGATTCC TGTGTATTG GGAAACTNNT NCCAGAGATG
GAGGTTCTCT CGGAGTATCT CGG

SEO ID NO:2221: (Length of Sequence = 373 Nucleotides)

CTCTGTCTCC CAGCCCGGAG TGCAGTAGCG CAATCTTAGC TCACTGCAGT TTTGACCTCC CAGGCTCAA TAATCCTCCC
GCCTCAGCCT CCTAAGTAGC CGAGACCACA GCTGTGCGCC ACGACATCTA GCCAATTATT TGTTTTTTGT AGAGATGAGG
TCTCACTGTG TTGCTCAGGC TGGGTAGGTG TCTAACTCCT AGGCTCAAGT GATCCTCCCA CCCAGNCTC CCAAAGTGCT
GGGACTACAG GCGTGAGTCA CCGCGCTGG CTTTGTTTAA GGCAATCTTT TTCGCGAGCA TCTGTTACCA GCAGCCTGAA
GNCATTTCTA TAAACAATTA TCANGGAAGA CACATGGGNC AGAGACCCTA AAT

SEO ID NO:2222: (Length of Sequence = 197 Nucleotides)

GTCTCCGTGA ATTCCCCAA ACGGTTCTT GAGGATGTGA AACCAACTTA TTGGGCTCAA TCCCATTGG TCACAGGATA
CTGTACGTAT CTNCCTTTC AGAGATTGA TATCACCAG ACACCGCAG CATACATAAA CGTGTACCA GGTTTGCCCC
AGTACACCAG CATATATACA CCTTGGCCA GCCTTTC

SEO ID NO:2223: (Length of Sequence = 280 Nucleotides)

TTTTTTTTT GCATTTTITAG TAGAGACGGG GTTTCACGTG GTTAGCCAGG ATGGTCTCAA TCTCCTGACC TCGTGATCCA
CCTGCCTCAG CCTCCCAAAG TGCTGGGATT ACAGGCATGA GCCACTGCGC CCGGCCAACT TTTTGCATGT TTTCTTTAAA
ATTTCTCTAC TTTTAATTGT ACTTCTAATA CAGACACTTC TGAAATCAGT TTTACATTG CTGCAGCCTT ACCAATTTGT
AGANACTGTT TATGTGATGT TTGATTCTT CATTTATATA

SEO ID NO:2224: (Length of Sequence = 388 Nucleotides)

GATTGCAGGC ATGAACCACT GCGCCAGTC GAGTGGTAAT ATTTTGAAAG GAAACCTTTT TCTGAGCAGG TCTCAAAAGA
GAGGTTAAAA TACTGAGTAG ACCATGCTGT AAACAGATGT GCTGTATTTC GGGCTTTGAT ATTCCATTTA TAAAGCACAG
GCAGAGCTCA GAGTAGATTT AATGTAACTC TGAAGGGCAC TAGGATTTTN AGAATGGTAA ATAAGCATTG GCTTCAACTT
AAATTCAAAT CTGCATGGC TTGTAATAAG AGACTAGCTT GTTACTGAAG CTTTNAAGCC AGTGTGTTTC TCCTATCTAG
CTAGGAAAGT CCTAGATGGT ATCTACTTCC AATAAAAGGC TGTTCGCGC AGGCGCGGTG GCTCACGC

SEO ID NO:2225: (Length of Sequence = 420 Nucleotides)

GGTCGAGGAG CCTGGGCGG GCGGGCGGG GACTACTCCG GAGTCAGGAG GCAGCAGNGG CGGAGGACGA GGATCTCTGG
CAGTCAGCGC CGCTCGGACG CCGCCGGCAC CATGGGCTGC TGCACCGGAC GCTGCTCGCT CATCTGCCTC TGCGCGCTGC
AGTTGGTCTC AGCATTAGAG AGGCAGATCT TTGACTTCCT TGGTTTCAG TGGGCGCCTA TTCTTGGAAT TTTTCTACAC
ATAATAGTTG TCATATTGGG TTTGTTTGGG ACCATTCACT ACAGACCTCG ATACATAATG GTGGACACCG ATCTAATGAC
ATTCAATATC TCTGTACATC GGTCAATGGT GAGAGAACAT GGGGCTGGT TGTNTCAAGA AGAGTGCTGC CTTCCCTCAA
GCCCCATGGC ANNGATGGAC

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AACCCCTTCT ACTTCTGAGC TGGGGGTAGG GGCACACACT TGGGATTGGT TCTTCAAGTA TATATTTTIN CCAAACATTA
GCTTCAGTGA AGAGTCTGG ATGATTTTCA CAGCTACACC CCTAAAAGCT ACATGGACAG AAAGACGTCA CAAGGCGCAA
GGTACATAAC GGTGGGTACA TAT

SEQ ID NO:2214: (Length of Sequence = 259 Nucleotides)

GTCATGGAGA TCCACAGCAA GTACTNGCGC TGCTGCAGG ANCAACCTCC ACAGCGGGGC GTTCTCTGAT CGAGGCTCAG
ACTTTCGAGA ACGAAGAAGC CGAGACGGTC ACCGCCATGG CCTCGCTNTC CGTGGGCGIN AAGCCGCGC AAAAGAGACC
AGATGAGGAG CCCATGGAAG AGGAGCCGCC CTNTAGCAC TNCCTCGAAG NTGCTGTCTT CTGTCTGTG TGTCTCTGTC
TTTAAGCTCA GCCAAGAAA

SEQ ID NO:2215: (Length of Sequence = 378 Nucleotides)

CACACATCCT CACCCACAG AAACGTCTGG ACACACTGAA GAAACTGAAT AAAACAGATG AAGAAATAAG CAGTTAAAAA
AATAAGTCG CCTCCAAA CACGNCCCCA TCCACAGCG CTCCGCAGCT TCCCACCACC GCCCGCTCA GTTCTTTGTC
GTCTGTGTC TCCCCAGCCC TGCAAGCCCT GGCTGGCACT GTTGGCGCTG CATTCTCGTG TTCAGTGATG CCCCTTCTT
GTTTGAANCA AAAGAAAATA ATGCATTGTG TTTTTTTAAA AAGAGGTATC TTAATACATN GTATCCTAAA AAGAGGAGCT
CATGTGGCAA TTGGTGCACA GCAGGAGGAA ATTTCTTGGG ACTTNTTTAG GNTGAATT

SEQ ID NO:2216: (Length of Sequence = 428 Nucleotides)

GAACCCACAC TGGGGAGAAA CCATATGAAT GTAAGGAATG TGGGAAAGCC TTCAATTATT CCAACTCATT TCAGATACAT
GGAAGAACTC AACTTGGAGA GAAACCTAT GTATGTAAGG AATGTGGGAA AGCCTTCACT CAGTACTCGG GCCTTAGTAT
GCATGTACGA TCTCAGAGTG GAGACAAGCC CTATGAATGT AAGGAATGTG GGAAATCCTT CCTTACATCC TCAAGCCTTA
TTCAACATAT AAGAACTCAC ACTGGAGAGA AGCCTTTTGT ATGTGTGAA TGTGGGAAAG CCTTTGCAGT TTCTTCAAT
CTTAGTGGGC ATTINAGNA CTCACACTGN AGGAGGAAGG CCTCTGAAGT NINAGATATG TGGGGENAAGT ATTTTGGGNG
ATCCCCCAT GTCTTTAATA ATCCCCAT

SEQ ID NO:2217: (Length of Sequence = 408 Nucleotides)

GTCATCAGAG TTCATCGTGA ACACCTGAA TGCGGCTCG GGGGCCTTGT CTGTCACCAT TGATGGCCCC TCCAAGGTGC
AGCTGGACTG TCGGGAGTNT CTTGAGGGCC ATGTGGTCAC TTATACTCCC ATGGCCCCTG GCAACTACCT CATTGCCATC
AAGTACGGTG GCCCCAGCA CATCGTGGGC AGCCCTTCA AGCCAAGGT CACTGGTCCG AGGCTTTTCC GGAGENCACA
GCTTTNACGN NACATCCAG GTTCTTTGTG GGAGACTNTN TACCAAGTCC TTCCTTAAAG CCGGGGGCTT TCAGGTTACA
AGNTTCCATT CCCCAAAGTT TTTCTCTCAA AATNNCCAGC AAAAGGTGGG TTGACTNGNG GGCCCTNGG GNTTTTCCCA
GGGCTTTC

SEQ ID NO:2218: (Length of Sequence = 316 Nucleotides)

TTTACAGAAT ATAGCTTTAT TTATAGAATC TTACAAATAA AACATTTACA GTCCACATAA GTTAATTINC TTTTCTAATT
TCTTCTCATA CACCTGAGTT ATTTAAAAA ATACTGTGAT GGAAGTGCAG AACTGTAAAG GGAAATAAGA ACAATAAAAT
CCTAACCTCT CTTCGAAAA TCAGACAACT TTGTTTTAAA GTAGATGCC AGCATATTGC CATCTCTTTG GAAGAGGACT
TACTATACTC AGCTCTTACG NTACCCAAAC AGAGAAGCCT TCTTTTTAAA ACCCAAGGTT AAGGGCCAG TGAAGG

SEQ ID NO:2219: (Length of Sequence = 319 Nucleotides)

GGCTTCTGT CCCACAAC TTCTCAGGTG GCGCTGGAC ACAGCAGCCA CCACAGTCCA GGCCTGCAGG GCAGGGTGTG
ACCCCTGCCCG GGCAGCCACC CCTCCCTGAG AAGAAGCGGG CCTCGAGGG GGATCGTTCT TTGGGCTCAG TCTCTCCCTC

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SEQ ID NO:2207: (Length of Sequence = 348 Nucleotides)

GTGTTTGTIT CTCTTTCCAC CATAATTGTA AGCTTCCTAA GGCTTCCCA GCCCTGTGGA ATTGTGGATC AATTAAACCT
CTGTCTTTTA TAAATAACCC AGTCTGAGGC AGTTCTTTAT AGCAGCGTGA GAATGGACTA ATACACCTCC CTCTTTGAGT
CTGGAAGAAT ATGTGAAGGG AGATTGCTAA GGACTTATTT ACAGAATGGT TCTTAAAGTG CTTGGGCAAG AACTATGTAT
TINTGGAGGC TGGTAGTGT TCAGTGAATC TGAAAACCTT TGTGACATGT GAGAAAGGTA TGCTGTCTCT GAAAGCTAAG
TGTATTATGA AGGATCTATA AAGGGCCA

SEQ ID NO:2208: (Length of Sequence = 154 Nucleotides)

GAATCCTGCT GTGCACATG CTTGAGATGG CTAATTATAT CTTTGGACTG TTGTACAAC CATTGACAAA TATACTTACT
TTCATTTCTG CTAATGCAAC TGAAAAGAGC ATTCTGTAAA TTGAAGAAAA ACAATAAAC AGNAATTAAC AACC

SEQ ID NO:2209: (Length of Sequence = 352 Nucleotides)

GAGGTTTCTG ATCTCCATC CAGCATCTTC CCTGGTCACA TGGTCCCAAC CTTTGTCTCC ACCCCCTTCT CTGTTCCTCC
CGCAGTCCAT GCTCCAGCCA TCCTGACTCT GTCCCTGGAT TTCTGGCTTA CTGACACCTG AGCCTGTGCA CAGGNCCTCC
CTCTGTATA GAGCAGCTT CCCATCTTGT GGACTGTCTT CCCATCTTGT GGACTCGGAG GGTTCCGAGC AGCCGTTGAG
GTGANGCTCC TATGACACCT CCNCCGTGAA GCCTNCCTCA CTTTTCCATT ACCAGTGAGG CCTGCCACAG CTTGATTTGT
ACTCTGATCC TGGCAGCAT GGAAGCCATC TT

SEQ ID NO:2210: (Length of Sequence = 338 Nucleotides)

GTCTTTCCAT CAAGAGTCAA TGTATATGCA AATATAGACT TAAGAACATA AGCATCCTGG TTTAATGTTG TTGTGAGCCC
TGTGGAAATA AAATTAACT CAGTGAATGT TTACAAATCA ATACATAGTA ATCCTATATA TGAAAGCTAA GATGTATAAG
ATGTTTATAA ATTNCIAT T AGAAAATACT GCTTTCTTAA AGGTGATTTT AAAAAGCTAG CTGATATCTG ATGGCTCAAG
CATCCAGAAA ATGTATGCAA TGATAAGNCA TTGACTAGGA TGAACAGAAA AGGGATACAG GAAAAGTCCG AACACATGAA
ATTCTAAAT AACAAGA

SEQ ID NO:2211: (Length of Sequence = 353 Nucleotides)

GTTCCTGGAG TACCTCTTC CCCCAACCCC AGACCTGCTT TCAGAGCAA ACTCAAGTCC CTCTTCCTCC GTGAAGCTTC
TCCCTCAGCT GAGCAGTGAT CACTTACTCA CTCTTAACCC CAATCCGCTG ACTGGGTGGG GACAGCACGT CCAGCCTTCC
CACCTCTCCT GCAGGCTTCT AGACGGAGTT TCAAAAATG ATGAGCCTCG ATCCAGGGCT TGAAAGAAGC CAGGGTGTA
TCTGTTCAT GCATGCNTCC CCAGAGNCTC GCCCAGTGCC TGNACATAG TAGGCACTCA ATAAATGCTG AATGGGTGAA
TAGTTGAATG ATAGGTGCTC AATAAATGAA TGA

SEQ ID NO:2212: (Length of Sequence = 293 Nucleotides)

GAGAAAGGAG GCAATCTCAG TCTCGTCTC CAAAAGGGA TACTACTAGG GAAAGCAGAA GATCTGAATC ACTGTCCCCA
AGAAGAGAAA CTTCTAGAGA GAACAAAGA TCTCAGCCAA GAGTGAAGA TTCTTCCCCA GGAGAAAAAT CCAGGTCCCCA
GAGCAGAGAA CGAGAAAGTG ATAGAGATGG GCAGAGGAGA GAGAGAGAAA GGAGANCCAG AAAGTGGTCT AGGTCCAGAT
CTCATTCTAG GTCCCCCTCA AGATGTAGAC CAAAAGTAA GAGTTCATCA TTT

SEQ ID NO:2213: (Length of Sequence = 423 Nucleotides)

NATTAACACC ACAGTGATAA ACAACTTTAA GCTTATGTTT CTTTATAGAT CACTGGCTCA CACATAATTC AAAACCCACA
CAGAAGCTAA GAGTCTTTAC ATTAATATA TTCTTCTTAA AAATCCTTAC TGTATGCATC TGTCCTCAAG CAGTAAAATT
TGATTATGCA CCATTTTATA ATTAATATGT CACATTTACA TAGCAAAATA ATGAAGGCAC AGCTAATACA AGCAAACTTA

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TCCTCAGTCT ATAGCATTAT TAACTTTCTA GGAGCAGCAG TGGAGTAGAG TGGTACTGAA TTGGTCACAG ACTTCATCCG
ATTATCAGGA TCCTGG

SEQ ID NO:2201: (Length of Sequence = 315 Nucleotides)

GAAACCAATA TAAATTTCAA AATAAACCAG CATACAGACC AATTGCAATT TATAGAAAAA ATAAAAATGT AGAAACATCA
CCTCCTCTCC CCGACCCAG TACTGAAATT ATACTTCCTC AGACATACTG CCCCATCACT GGAAGGGTG CCGACAGATT
GGGTACATTT ATAGANTATT AAATAATTAA GTACAGAGG CACCGTTTTT GCATGTATGG TCCCAAAGAC TTTTCACTT
NTTTTTCAAC ATTACAGTGT TTAAGAATGG AAATTGAAGG AATTGTACAT ATTTTCACTG GCAGTTTCTT ACAGA

SEQ ID NO:2202: (Length of Sequence = 328 Nucleotides)

GCTCTGTAC TCAGCCTGGA GTGCAGTGGT GTGATCTCGG CTCACTGCAA CCTCTGTGTC GCAGGTTCAG GCAATTCTCA
TGCCCTCAGGC TCTGAGTAG CTGGGATTAC AAGCATGCGC CACCATGCCC AGCTAATTTT TGTATTTTAA GTAGATACAG
GGTTTCGCCT TCTGACCTC AAGCTATCCA CTCGTCTTGG TCTCTCTCAG TTCTGGGATT ACAGGTATGA GCCACCATGC
CTGGCCGGA TATATATATT TTTTACCACT CTATTTCCAG TGCCTAGACT AAAACCCAGC ACATGGTACA CGTCATACAT
AAGGAAGG

SEQ ID NO:2203: (Length of Sequence = 268 Nucleotides)

ATTTTGTGCT CGTCGCTCAT GCCACCCTG GGACCAAGG GGTTCGGG AGTGGTTTTT CTGGCTTGT TCAGCCTTTT
CAGGCTCTCT TCATCTTCT TCACAGAGTT TAATACATCT GACACGGTTT CATAGTACTT ATGAGTGCTT TCACTGAGAG
TGCCCTCTAG CCACTGCTGA ATTATTGCTT GTTTGAGCTT ATCCTTGTGT CCGCTCTGAA GCTGGAATAA GGGCTTCANA
GCATGTCCA CATAGGAGGA AGCTTTGG

SEQ ID NO:2204: (Length of Sequence = 353 Nucleotides)

GTAAATCINA GTCAAGGAT GTCCCATGAT GGATGATGAC TGANATGGAC GGAAGTTTGG TTTGAAGCGG TGGCATTGGT
GCAGGCTGGC AGAGGGGGCA GTTCTGGATA GAGTGTCTG ATGAATGGGG ATACTCATGG GAGGTGATGC AGATGAGGAT
TCINTGCTTC TNAAGGAGGA GCCAGGCATT TAGAATGGCA CTGGAGAGCA AGGACTGACT GANCCCCCTC ACTGTGTCCC
CAAGAGGCA GGAAGGGAAG ATTGGAGGAG ACAAGTTGA AGTGAGTTTT CCAGGGAACG AGTCAGTTAA GAGATGGTAG
GATCTTAAGG GAAGATGGCT AAGATCTTAA GGG

SEQ ID NO:2205: (Length of Sequence = 265 Nucleotides)

GTTTACCAT GTTGGCCAGG CTGGTCTCAA ATTTCTNACC TCAGGTGATC CACCCCTCCT CAGCCTCCA AAGTGTGGG
ACTACAGGCG TGAGTCACTG CGCCAGCCG TGGTTTTTTT TTTTLAGAAA CAGTGTTTTG CCATGCTGCC CAGGCTGGTC
TCAAATCCAT AGGTTCAGT GATCTCCCCA CCTCAGCCTC CCAAAGTGTG GGGACCACAG GCATGAGCCA CCATGCTTGG
CCAGAAAGAA GTTGTTAACA AAATG

SEQ ID NO:2206: (Length of Sequence = 340 Nucleotides)

GCAAGCTTA TTTTTCAGT TGTGGCTCT AGTTTGGTTG GGAACTATT TCCTTAGACC TGGGTACCC CTCGGCTCC
CTTAATCTCC CGCCATATGT TCTCCAGAAT CAGGGCATGG TGTCTGCC TGGTGGACT CAGCCCGGTT GCTTTGCACA
GACTCTGGGC CAGGCAGGA TGTCGGTGT TGCCGGGTG TCGCCGGGTG TTATCTGTGG CGCTCAGTAT GGTGCATAGT
GTAGACACGT GCCCTAGGTG GTGTTAATT GATCTGGGTA AGACTCAGNC AAGGCAGGC ACAGTGGCTC ACGTCTATAA
TCCAGCACT TTGGGAGGCT

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TAATTCATTT GAGATTCCAC TCGATTCTAC TTGAGATTCA TCCACATTGT TGAATGCACA TTCTTTTITA TTGTTCCTGT
AGCATTCTGT TGTGCAGCTG TGCCCCAGTT TGTITANCTA TTCACTCTCA GTTGTTCCTA GTTTTAATGA CAACTTCAG

SEQ ID NO:2195: (Length of Sequence = 172 Nucleotides)

TCAAAGTCAG CTCTTGACC TGCAGGGCTT CAATTTGTGG CTGACAGTTT TAACTCAGAA AATCCCTGAC TTGATTGGCT
ACATAAATNA TATGATATAT AGCCATTAAG ATCATGGTTT TGGAAAGTAT TTTAATGATA CAGGAATGTG CTCTGAAATA
ATAAGTGGGA CT

SEQ ID NO:2196: (Length of Sequence = 398 Nucleotides)

GCAAAAAAAA AAATTATTAT CTCCACTTTA CCAGTGCTGA CACTTCACCA ATGTAGGGCT CTCAGTGA CTAGCCAGGGT
CATGCACAGC CTGTTTCAGC AGCTACCTTG GACTTGAACC CAGCTGGTC TGTCTGACTC AATGCCTATA GTCTTAACCT
TTCCAGCAGC TGCTTCTTTG TCAAACAGGT CCTCCCGCAG GTTTTCACAG CCCAGCCCT TACTCAACAA GTATTTATG
ACAGGCCTCA GGAACACTAG GCAAGTAGGA TAGCAATGAA CAAGATGCTG ACCTTGACCT TGACCTGCA TCCATAGTAT
GAGCATTTTA ACTGGGGGAG GGTTCGAAA GTTCTCTTAA ACAGTCTACT ACATGCTCTG TAAGCATTTT CTATGGG

SEQ ID NO:2197: (Length of Sequence = 313 Nucleotides)

GTCCCTGTG CATTGAGTGC ATCCCGCTG GTGACTAAGC TGCAGCAAG CGGCTACCCC CCGATCTGCA AAAGGGCTTC
TCCCTTTGTG TTCTATACAT TGTGAATCTT CCGTCTGAA GAACGCCAG CCTGCCGAGA CAAAGCCCCG CCTTNCCTAA
AGCAGAGGGG CTGTCTGTGT CTCCAGAAAG GGGACATCGG GGGGGAGGGG GGCTCAGAAA GGAGAAGGGC TGTGATCTCC
GGTCCCTTCC CCCATCATCC TTCTTAGAC TGATGCTTTG ACTGAATCAT CACTAGCTAT GGGCAATAAA AGG

SEQ ID NO:2198: (Length of Sequence = 360 Nucleotides)

GGTCTCACTA TGTGCCCCAG GCTGGTCTCA AACTCCTGTT CTCAAGCGAT CCTCTGCCT CGGCTACCA AGGTGCTGAG
GTTACAGGGG TGAGCACTGC ACCTGGCTAG GAAACTNAGT TTTTTCAGTG GTAGAGGCTC CTAGCCAGTG GCCAAGGGAA
AGAGAGAGTT CTGGGTTCAG GGGCTGGCAG GAAGTCAGCA AGACACCAGG GACTGGCTC CACTGGCTGG ATCTCAGGGA
AGAGCAACTG CCACAGTGGG GACCTGGAAC ACAAAGGGAA ACTGAGGCAG CAGCTGCACC ACAGTTTACA AGTAGAAGA
CCATGCTTGA GGACAACAGA AGTTTCACTA AGGATGCACG

SEQ ID NO:2199: (Length of Sequence = 374 Nucleotides)

TTTTGGGTAG TACCTTGCC CTCTTCATGG CCACTTCAAA GTGAAGCCAG CAAAGTGATA ATACTTTATC ATTTAGTATT
ATCATAAAGT ATTAATACTT TGTATAAAG TCCTCCTTGA GCCAGGGAC CATGGAAGTC AGCTAGAAGA GCCCTGAGCA
AGGAGCAAGG ACTTGGGCTT CTCCACGCTT TGCTCCTGGC TTGTTTGACC TTGACTCATT CCCCATATGT CTTTGAGGAG
GCTCAGAAA TACTAAAGCT GGGAGGAAC TTGGAGATCT ATAGGTCAAA CCTCCCCATT GGGCTGATGA GAAAATACAC
GCAGGCCTAG CATGCTGCCT GCCACCATGG TGGGATCCAG TATGGTTTAA TAAA

SEQ ID NO:2200: (Length of Sequence = 416 Nucleotides)

CTACTAAAAA TACAAAAATT AGCCAGGCGT GGTGGTGGC ACCTGAAATC CCTACTCAGG AGGCTGAGGC AGAGAATCGC.
TTGAACCTGG GAGGCAGAGG TTGCAGTGAG CCGAGATGTT GCCACTGCAC TTCAGCCTGG GTGACAGAGC GAGACTCCAT
CTCAAAACAA AACAAGCAAA CAAACAACAA CAACAAAAAA TACCTCTTGA CTTCTAAAGA CGCAAAAGTG GCCAAAGTG
CAATACAGTA TTGTGTTTAT TTACATCTAT TTTAAATGCA TGTGTATCTG TAAATNCAA GTGATTCGTG ACTCATGTG

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GGCCCCAGCT CCTCTTCTG CCTCTININAT GGCTTGGGCT GGAGTGGGCT CTCTGGACCT GACCGGGGGT CAGACTGTGG
 GTCCCTGGGT CTCCTGCCCA CTCINACCGG GCTTCTCTCC TCACGCTTA GGGTCTGTCC CGGGTACTCA GTCAGCCAG
 TGGGATCTTA CCCACTTCCC TGCAAGGTGC ACCTGCCCCA GGCTCAGGCT GCCCAGCGGC TCTTCTGGA CAGTAAGAGC
 AGGGCTGGGC GCCTCTTTCC TGGCCCGGAA GCGCAGGGG CCCCTCTCC AGAGCCTNGG CGCAAGGAAC ACAAGGCTGC
 CGCTGCTCTT CCAGG

SEQ ID NO:2189: (Length of Sequence = 366 Nucleotides)

AACITGGTGA TCAGATOGAN TTCTACTTTT CTNATGAAAA CCTGGAGAAG GACGCTTTT TGCTAAAACA CGTGAGGAGG
 AACAAAGCTGG GATATGTGAG CNTTAAGCTA CTCACATCCT TCAAAAAGGT GAAACATCTT ACACGGGACT GGAGAACCAC
 AGCAGATGCT TTGAAGTATT CAGTGGTCTT TGAGTTGAAT GAGGACCACC GGAAGGTGAG GGAGGACCAC CCCCCTCCCA
 CTGTTCCCA ACGAGAACCT CCCAGCAAG ATGCTCTGG TCTATGATCT CTACTGTCTT CCTAAGCTGT GGGCTCTGGC
 CACCCCCCAG AAGGAATGGA AGGGTGAAG AGAAGGTGAT GGAACA

SEQ ID NO:2190: (Length of Sequence = 333 Nucleotides)

CTGCGATCCA GCCTAGGCAA CAGAGTTGAG ACCCTATCTC AAAACAAACA AAACAGCCAG GCACGGTGGC TCATGCCTGT
 AATCCCAGCA CTTTGGGAGG TCGAGGTGGG GGGATCACCT GAGGTCCGGA GTTCGAGACC AGACTGACCA ACATGGAGAA
 AGCCCATCTC TACTAAAAAT ACAATATTAG GGGGCGTGGT GGTGCATGCC TGTAAATCCCA GCTATTTGGG AGGCTGAGGC
 AGGAGAATCG CTGAACCTG GGAGGCGGAG GTTGCACTGA GCCATGATTG AGCCATTGCA CTACAGCCTG GGCAAGAGCA
 AACTCCGTC TTC

SEQ ID NO:2191: (Length of Sequence = 284 Nucleotides)

AAGTTTATAA AAGTTTGATT ACTGGAAAAG TCGATCTAA TTCAGAAATT TCAGGCCAAA TGAAACAGCC CTTCAAGCA
 AACATGCCTT CAATCTCTCG AGGCAGGACA ATGATTCATA TTCCAGNGT TCGAAATAGC TCCTCAAGTA CAAGTCTGT
 TTCTAAAAAA GGCCACCCC TTAAGACTCC AGCCTCCAAA AGCCTAGTG AAGGTCAAAC AGCCACCANT TCTCTAGAG
 GAGCCAAGCC ATCTGTGAAA TCAGAATTAA GCGCTGTGC CAGG

SEQ ID NO:2192: (Length of Sequence = 260 Nucleotides)

ATGACGACGG CTACCTCGAG GTCATTGGCT TCACCATGAC GTNGTTGGCC GCGCTGCAGG TGGGCGGACA CGGCGAGCGG
 CTGACGCACT GTGCGAGGT GGTGCTCACC ACATCCAAGG CCATCCCGGT GCAGGTGGAT GGGAGCCCT GCAAGCTTTC
 AGCCTACGC ATCCGCATCG CCTTGGCAA CCAGGNCACC ATGGTGCAGA AGGCCAAGNG GCGGAGCGCC NTCCCCCTTG
 CACAGCGACC AGCAGCCGGT

SEQ ID NO:2193: (Length of Sequence = 247 Nucleotides)

GGTCTCAGCA CTCGCTGGGT GACCGCGGG AGCAGGCAA GGAGGGCTCC CAAGTCCGTT CTGCAGCACT GGGGAGGGA
 ACAGACCCAG GNTCCTGGGA ATCTCTTCT CCTAGCTTT GCTGCTGC CAGAGCAGG CCTGCGGTTT GGGTCTGTIN
 ACCNTCCGGG GCGGGGGGA GGGCAAGNA GCGGATCTC TGAAGTCCG CCAACTTCG CTNCTGATCC CCAAGGTCA
 GAGAGGG

SEQ ID NO:2194: (Length of Sequence = 399 Nucleotides)

CCTCCATCTC CCGGGTTCAA GCGATTCTCG TACCTCAGC TCACAAGTAG CTGGGATTAT AGGTGTCCG CACCACACCT
 AGCTAATTTT TGCAATTGTA GCAGAGATGA GGTTCGCCA GGTGGCCAG GCTGGTCTTG AACTCCTGAC CTCAAGTGAT
 CCACCCACCT TTGTTGGCCT CCCAAAGTGC TGAATTACA GGCAACATGT AGCCTTTGAG TCTAGCTTCT TCCACTAGCC

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CTCCTTGAGT CTGTTGACAC GTCACATGGT CAAAGTCTCC TCAITTCAGC CAGTCTCAAC ACAAACACC CAACAGGGAT
GCACTCAACT TGTGTGTTCC ATGTGGAAGT AGGTGGCAGG GCGAGAGGGA AAGTAGTAGA AGGGGGCTAT GGTGTGTCG
CAITTCAGTCC CCTCACATAA AGCCACATGG ATCTAGGGGG GTATCCAAGA GCTCTGGTGG GGTCCGTGTT GCACCTAAGA
CAITATAGGT CAGAGCAAGT TGCTCAGAGG GTTCCAGGCA GGGGGCT

SEQ ID NO:2183: (Length of Sequence = 389 Nucleotides)

GATCCAGAGA GGGCTCCAGG TGGAGTCCCT TTTTCTGCAT AAGGGGCTGT GACCGAAGCA CAGAGGGGAA AAAAAAAGT
GGTGGGAGCC TCCTCTGGTT TCACCTGAAG AGGGAGGTGG AAGGGCCTGA AAATTAGATT TTNTTTATAA ATAATAGATA
TTATAGGTAT ATTTNCATAT TTTTACATAA TGATGCCAAC CACAAACAAT GGACCATAAA GCACTGACCT CAGAATGATC
AAITGCAAAA TGTTTAAACC CTGGGAAGCT TTTGCTTAGG AGGGGGGATA TTCTGTGTTG ATGTTATTCT ATAGCCATAA
ACTTCCCTGA ATTTNCTGCT AATGTATCCA AGTCCAGGGA AGTCACTTAA AACTCTTCAA ATGCAGCTT

SEQ ID NO:2184: (Length of Sequence = 383 Nucleotides)

GCAAGAGAAG CGGTTTGGGT CTCTGAAGGA AAGGCCAAAA CCCAGAACAA AGAAGAATCC TATGACTTCT CCAATCCTA
TGAATATAAG TCAAACCCCT CTGCCGTGTC TGGTAATGAA ACTCTGGGG CATCTACCAA AGGTTATCCT CCTCCTGTG
CAGCAAAACC TACCTTTGGG CGGTCTATAC TGAAGCCCTC CACTCCCATC CCTCCTCAAG AGGGTGAGGA GGTGGGAGAG
AGCAGTGAGG AGCAAGATAA TGCTCCCAA TCAATCCTGG GGCAAGTCA AAATATTTGA GGAAGATGNN TCCACAAGGC
CAGGTTACAG AGGAATGCAA GGAGCTTCCA GGAAGCACA GAATCCAAG TTTTCGGAAA TTT

SEQ ID NO:2185: (Length of Sequence = 359 Nucleotides)

CTTTAATTCA CATCACAGCA GTCAAGGAAG TGGGGAAGG GGAAAAAAT CAAGTGGCAG ATATTTACAT CTAAAATTCA
CAITACTTGT TGGATTTTGA ACATGCTACC ACAATATATA CAGTAAAATA CCTCTTGGGA CAATGGTACA AATTTTGT
CCTTTAACIT TGCTTTTCIG GTACAGGTAA GATCATTTTT AAATCACTTT TTTNCTTTAA ACATGAATAC ACAAAGAAA
TGGTTAGAAG TTTCTTGT TTAATAAGC ACAGAATGCG GGAGGTTAAA AACACATTTA TAGTGCTGAA TACCAATTGG
NCATCACACT CTATACATTT TTTGCTCAA TTCTGTAC

SEQ ID NO:2186: (Length of Sequence = 337 Nucleotides)

ATAGTTATAC TCAGTGAAAT TAACAAGACC CAAAGGTGGT ATTGTCTAGG AATAAAAGGG ATAATTTTGG TTGTTACAA
AAGTAACTTG TCTAGACCA CACATCAGAA AAACACAAAA ATAGCAGACT CTAGTTCTAA ACAGCTATGT CTAAAATAGA
TTATATAGTA AAACCGGTAT TATACAGCAT ATTGTGGATT TGATAAACAG ATAAATATTT GCNCTGAGTA GGCTGTTTAT
AATATAACAT TTNCTTATCT ATACAGAATG AAAGCCAAAA AGTTAACTGT ATAGAGATGT GCAGACAAC ATTAAATATT
ATGGCTCAA AGCAGG

SEQ ID NO:2187: (Length of Sequence = 329 Nucleotides)

GCAITINTCA GCACAGATAG AGCCCTGTCC CTCCACCTAG TGCCCACTCC ATGACTGTTA ATAATAACAA TAATAATAAA
ACTACTGGCC AAGCACGGTG GCTCATGCCT GTAATCCCAT CACTTTGGGA GGTCGAGGTG GGCAGATCAC CTGGCCCAAC
GCCACCGCT CTAGCTCCGG GCTCCCTGAG GTCCCCAGTG CCTTNNCCGG TCCACGGCT CCCACGNTGC CACCTGTCC
TGACTGCCA CCTGCTCTTG TGGGCAGACT GCTGATCGAG TTCACCTCAC CCATGCCCTT GGAGGCGGGT GCAGAGGGAG
AACCAGGC

SEQ ID NO:2188: (Length of Sequence = 335 Nucleotides)

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ACCTGGAGGT CCTCGGCTAC TCACCTGGG GGCINCTTGC ACAGCCCAGG AGCTAGCCCA GGGCTGCCTC TAAATGGTTC
CCG

SEQ ID NO:2176: (Length of Sequence = 399 Nucleotides)

AGGCAACTAT TGAGGGAAGA GGCAGAAAAA GGAAAAAGGA ATGTACGTAA GGCAATTTTN CTTAAAAGTA CAATAAGCTT
AATAGTGTTC TAGGAAGACA AGATAAAAAT TACTCAAGGC TAGCTTGGTT CTCCTGAAT AAAACAAAG GACTAAATAC
TGAGCTCCTT CTGTGTGGAT CTAATAATCA ATGCTTGGT CGCTATATTG GTAATCTCTG GGGTAGTCAT CCTGGTACTC
GCCATGATAC TCATCAGGGT ATTCTGCCTG ATAATCACTA TCACTGATTT CGAACCATT TGTTCCTGTT CCTTGGCTTC
CGTTGTGAAT GACAGGTCT GTAGGAGCAG CACAGTATTT GGGGATCATA TACTTGCCGN CCAAGGCCAT ACAAACCTCA

SEQ ID NO:2177: (Length of Sequence = 302 Nucleotides)

GGTTTTTATA AAAATCAGAA TTTTCAAAT GCATTGGTCA TTTTCAGATG CATTTGGTCAC ATTTCAATTAT TCCATATCAA
AAAACGTCAT TGTTAATGT CACACAAATC TCATTGGAAA GGTCTTCAAG TATTGTGAAG TGTCCAGGT CACAAAGATG
AATGCTAGTT TTTCAAATTT CTAATTTTAA CTTGAATGCT CAAATCTTAT AATTGGTAAAC CCGGTCAGTT TTTCTTTAGT
TGATAGGCTT ACTGCTTTTA TGTGTGAGA ATACTTGTCT GTGAAACATC CAAATCTGGA AG

SEQ ID NO:2178: (Length of Sequence = 343 Nucleotides)

GGTTTCACTC TCCTTGCCCA GGCTGGAGGA GCAATGTCAT GATCTTGGCT CACTGCAACC TTCTCCCTTC CAGGCTCAAT
CAATTCTCCT GCTCAGCCT CCGAGCAGC TGGGACTACA GGTGCGTGCC ACCATGCGCA NTAGGTTTTT TTTTGTAGA
GACAGGGTTT TGCCATGTG CCCAGGTGG TCTCCAATC CTGAGCTCAA GINATCTGCC TGANGTCTG GGATTATAGG
TGINAGCCAC CACATCCAGC CTCCTTTTAA TGTMTGTG ATTATTTATA GTGAAAGATT TAAATTCCTT TCTATTTCTT
TGTGGTATAT ATTCTATAGG CTA

SEQ ID NO:2179: (Length of Sequence = 377 Nucleotides)

AGATCATCAG GAATTAGATT CTCATAAGGA ACACACAACC TAGACCCCTC AGAGGTGCAG TTCACAGTAG GGTTCATGCT
CCTATGAGAA CCTAATGTG CAGCTGATCT GACAGGAGGC AGAGCTCAGC TGGTAATGCT CACTCACCTG CTGCTCACCT
CTTCTGTGT AGCTCGGCTC CTAATAGACC TGTATGTGTC CATGCTCTGC GAGTTGGGA CCCCTGCAGG AAGTCTTGTA
AATGCAATGC AGGAACTTA CTGTTACAG CCACATAGTT TGTAGTAGTA AGGAACTAG GACAATCAA ATATTCACTA
NGGGGAAAC TGGGATAAAT TGTGGGTCAA TTTTATATGT TTCATACAGG AAAAAAG

SEQ ID NO:2180: (Length of Sequence = 195 Nucleotides)

GATATTTGCT TTTCTCAGAA CCATAATCGA TACAAGATGC AGTGACCAAT TCATTCTTAA AAACACCTGG GCTCCTTAAG
CGGCTAGAAG ACACAAGTTA CATCCAGCCC ATCAGGGAGC CAGAGGNGA GGGGTCCCA GCCAAGCTCT GENCAGGCCT
GCCATGGGGC AGNGCCTGAC CGTNCAGCCA GAGGT

SEQ ID NO:2181: (Length of Sequence = 244 Nucleotides)

TGCGGTGGGA ACGGCCCCG AGCGGAGGA ACGTGACTCC CCAGAGGGA GATGGGCATC ATACTGGGCC CAGAGCTGGG
AAGGAGTTGC TGCCAGCACA GGTGGGCT GGAATCCCT CCCCCCTACC CCAAGTGGTT GTGGCTGTAG CCTAAGCCT
GGAGAGCAGG ACCGCCCCG GGTGTNTNGN AGGCTGCCAG GTGCCCTCCA GAGCTCCCAA GGGCCCCAC CTGCAAGTNC
CAGC

SEQ ID NO:2182: (Length of Sequence = 287 Nucleotides)

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TGTTGCATCT TTAACAGCTG TGTTTGGAAA AGGGTGAGGA ATTGATTTCAT CAATATTCAA TACTAAGCTG CAAAATCAGG
AATGCAGCCA ATTGGTTTAA TTGATCAAGG CTTATAAACT CTTAAGGGAC TCTAGTGAAC TGATACAAAC TA

SEQ ID NO:2170: (Length of Sequence = 273 Nucleotides)

GTTGTGTGTG ATGCTGTGTG TGTTGCTTTC TGTTTGTTTT TCTTGCAATG GTCAGGTCCC ACTCTGAACT CCGGGGGGCA
CCAACCTGAT GCCAGTAGGA TTGCCCTTGT ATAGGGTGTC TGACAACCCC TGTTGAGGGT CTCACCCCTGT TGGGTGGCAC
ATGGAATAGG ACCCATTTAA TGAAGCACTT TTTCCCTTGG TGGAGGTAGT GTGCTTTTCT GGGGAAAAC CCCTTGTCT
GGGCTGCTG GATTCTCAG AACTACCAGG AGG

SEQ ID NO:2171: (Length of Sequence = 357 Nucleotides)

GTGATGTACC CCAGCACTAG GGAATGATGT GAGTAAGACC TAATCCCTGC TCTCAGGGAG CTTATAGCCT ATGGCAGCAG
CAACACTAGT AAAAATTTAC TACTTTGATA GGTGCACATC TTCTTTTGGT CAGCAATTTT CTCAAACCA CTGTAACATT
TTACTAAAAT GCTAAGCTTT GATTGTTTTT CAACTACTTC TTGAGAGTTT CTGCATGTAT GATAAGGGCA AGACATTACA
CTGAGGTATT GATGCTGATG AGCAGCAAGG CTCCTGGCT GGTGAAGGGA TACTGATTAG CACACCAATG TGCTGCTCTT
GAACACACAC CTCCACAAA TTACAAATTA TCTTCCA

SEQ ID NO:2172: (Length of Sequence = 381 Nucleotides)

GAAGAAGGCC CATGGAGCTA AGGCTCAGA ACACCAAAGT CTGGACTGTC TGAGGGCACA TGCTAATAAC AGGAGGCTGG
CAAAGTGGCC AGCTCCCATG CCTTTCATG CATTCTTCTT TACCTCCTGC TGCTGGGAA CATCTTCCA GGAGCAATCG
AGTCAACAGC ACCACAGACA CTGCTATTCC GTTGAGAAAA GTTTTATATG GAAACACATA CTGATCATGA ACACAATAAA
CAGGGAGGGA AGCTCGGGCT CAGCCAGGAA ACCTGCCACA AGGAAGATGT TTGGAAGTAT CCAGGAGTAG TGTCAAACAC
TAACACCATA TTTACAAGTC TAATTGGAA CCTGGGCCCT TTITAAGTGC AGGAGGAAGT T

SEQ ID NO:2173: (Length of Sequence = 351 Nucleotides)

GAAGTTCCGG GAGCGCCTGA AGGAGCTCGT GGTCCCCAAG CACGTCATGG ATGTTGTGGA CGAGGAGCTG AGCAAGCTGG
GCCTGCTGGA CAACCACTCC TCGGAGTTCA ATGTCACCCG CAACTACCTA GACTGGCTCA CGTCCATCCC TTGGGGCAAG
TACAGCAACG AGAACCTGGA CTTCGCGCG GCACAGGCAG TGCTGGAGGA AGACCACTAC GGCATNGAGG ACGTCAAGAA
ACGCATCTCG GAGTTCAITG CCGTTAGCCA GCTCCGCGGC TCCACCCAGG GCAAGATCCT CTGCTTCTAT GGGCCCCCT
GGCGTGGGTA AGACCAGCAT TGCTCTGGTC C

SEQ ID NO:2174: (Length of Sequence = 308 Nucleotides)

TCATTAAATA GCTTCTATGC CACACTCTGA TTAAGCCGAC TGAGGTCCCT GGGATCTGGG TCACTGGACC GAGCTGCTCG
CTCGGTGGCT CCACTGCCAG GTCCGGGCGC GCTCCCCACA GCCTCAGT CTGGCCGAGA CAGGGCTGA CATCCGCGCG
CTGCAGTCCC GGGGTGGCCG TCACCGTTCC ACGGCCAGNG ACTCTNCTG CTGTCGCGG AAGGCGATGT CGAAGATCTC
CCGGTAGTNT TCCACGAAGG TAACCTCCAG GGCCCTCGGT GATGAAGGCT TCCAGGTCGT AGAAGTCC

SEQ ID NO:2175: (Length of Sequence = 403 Nucleotides)

CTTGCCCAAG GGCCTGAGCT GGTGGAGGCA GAGCAGGAGT TGGATCCAGG CCTGINTGAG GCATCCTGCC ACCTCCATCC
AGACCTGGAG CAATCCCTGA GAAGGTGGC TACCACCAGA GATGTGGCAG CTCTGGTCTC AGGAAGCATA GCGGAGGAT
GTCCAGGCA ACCAAACAGC CATTTCATCAG TAAGGAGCCA GAGTNAAGGC TGCTAGTTCA GCGCCCGAA GGTGGTCCAG
GGCAGCCAG TNCAGAACTC AGCAGGAGCT CAGTTCCAAC TGAGCCTGAT TTCACTCCAG TGTCCACAAG GGACATCCTG

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CCCCGCCACC TCCAGCAGGA GCAGCTCAGT TTGTGGCTCT GGGAGCTCCG CTTTIGCAAA CCCAAAAAGG CTGTGCATTT
 GGAAGCCAAA CGCTCAGCAT GCGGCTGCCG AGTCTGGTTT TGTGGACAAA GCAAACTGTG GAATGGCTTC TCGGTGTCTG
 TATAAAGGGA CAAACGGTTG CATTACCCCT TTGTACTATA ACACCGCTTC TGCATTGGCC ATATCCGTTT TTAAACCTTT
 TTGTCTCCGG GGAACCTTCT ATTGATTAT NATGTCTTCT GATGA

SEQ ID NO:2164: (Length of Sequence = 296 Nucleotides)

ATGTTTGTAA ATCACTTCCT TTTCCTACAA TATTTCTAAT AAGAAAGCTT ATAACAGCAC TTTATGACA CCCTGGGACC
 CCGGGCAGGG TCAGCAAGAC TCCCAGCTGG CATCAGACTG TGTCTGGCCT GCTGTGCCA TCCCTGAGGG GTGCAGGACA
 GAGCCCCATA GGCAGAGAG GCCTCCCTGG GACCAGAGGA GGATGCTGTG CAGCCAGGCC CATCCCCAGC ACTCGAGGCC
 TAGGAGGAGA GGTGGGCTCT GGCAGCGGT GINAGGTGGC AGTGAGAAGC CAGGCC

SEQ ID NO:2165: (Length of Sequence = 310 Nucleotides)

GTTTTTGTAA TGTTTTTCAA ATAATGTTTT TCTGTGTGTG TTTTTTINCT TTTTTTGGAC AGGNTCTCAT TCCCATGCCC
 CAGGGTGGAG TGCAGTGGTG CGATCTCAGC TCACTGCAGC CTGACTTCC CAGGTTGAGA TGAATCINCC ATCTCAGCCT
 CCCGAGTACC TGGGATTACA GGCACACACC ATCATGCCCG GCTAATTTTT TGTATTTTTA GCAGAGACGG GGTTTTGCCA
 TGTGACTCAG GCTGGTCTCG AACTCCTGGG CTCAAGAGAT CCGCTGCCT TGGCCTCCCA AAGTGTGGG

SEQ ID NO:2166: (Length of Sequence = 361 Nucleotides)

GATGGAACT GGAAAAAAA TAATTGTAA GCAACAATTT TAGATTTTTT TATGGAGGAT AGAGACATTT GAATCAGATA
 CCAAGAAATG TATAGTAATC ACTCAGATAG AAAGATGTCT AAAATGGATT TTAAATGGGA TOGGGGAAAG CAAGGTGCTG
 AACAACATGC TGTACATACT ACTTATAAAT CAAAGCAAAC CACTAGCAAA CTGATGTCAG TACTAACACA GGTGGAAGTG
 GGATTGTGGC GGAGGGGAGA GGTAGTAGG GTAGACTTAT TTGTACCAAT TTNATTTTTG ATATTTCTTT TATATACAGA
 TACATAAGTC TGTATATACA TGTATGTCCA ATTATCTCCT T

SEQ ID NO:2167: (Length of Sequence = 325 Nucleotides)

TCCTGGGCTG TGCTCTGTTT GAAGGGGGCG CCTGCTCCC CTCAGATCAG TCAGGAGGAA GATGACTAAG GGGAGGGATC
 CTCTGGGTGA TGGCCTCTTC CTCCTCAGGG ACCTCTGACT GCTCTGGGCC AAAGAATCTC TTGTTTCTTC TCCGAGCCCC
 AGGCAGCGGT GATTCAGCCC TGCCCAACCT GATTCTNATG ACTGCGGATG CTGTGACGGA CCCAAGGGGC AAATAGGGTC
 CCAGGGTCCA GGGAGGGGCG CCGCTGAGC ACTTCGCCC CTCACCCCTG CCAGCCCCCTG CCATGAGCTC TGGGCTGGGT
 CTCOG

SEQ ID NO:2168: (Length of Sequence = 348 Nucleotides)

GGAGAACCGT TCGCGGAGGA AAGGCGAACT AGTGTGGGA TGGCCACCAA CTGGGGGAGC CTCTTGACAG ATAAACAGCA
 GCTAGAGGAG CTGGCACGGC AGGCCGTGGA CCGGGCCCTG GCTGAGGGAG TATTGCTGAG GACCTCACAG GAGCCCACTT
 CCTCGGAGGT GGTGAGCTAT GCCCCATCA CGCTCTTCCC CTCAGTGGTC CCCAGTGCCC TGCTGGAGCA AGCCTATGCT
 GTGCAGATGG ACTTCAACCT GCTAGTGGAT GCTGTGAGC AGAACNGNTG CCTTCTGGA GCAAANCTT TTNCAGCACC
 ATCAAACAGG ATGACTTTTA CCGCTCGT

SEQ ID NO:2169: (Length of Sequence = 392 Nucleotides)

ATTTTGTGA GTTCCAGTTT GGGTGGCAGA AACTAAGACA CTGAGCTGAT GAGAGAACTT GTTGCTTTTC GCCTGCGCA
 TTTATTTATT TATTATTTTA TTTATTTTGT TATTTTGTAGT AGAGACAGAG TTTCACCATG TTGGCCAGGC TGGTCTCAA
 CTCTGACCT CAAATGATCC ACCCACTCG GCTCCCAA GTGCTGGGAT TACAAGTGTG AGCCACCATG CCGGCGCAC

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CTGGCTAACA TGGTGAAATC CCGTCTCTAC TAAAAGTACA AAAAATTAGC TGGGCGTGGT GGTGGGCACC TGTAGCCCCA
 GCTACTTGGG AGGCTGAGGC AGGAGAATGG CGTGAGGCAA CAGTGCAGCC TGGGCAACAG TGCACCTCCT CCATCTCTAC
 CAGCGTCCCC TCCAGTCTGC ACGGGGCAGT CCTCCTGGGC TTGACCTCTC TGTACCCACA GCTGGGGGCC AGGCAGCCCC
 CCTCTATCCC TCCCAGCACC TACTACATCG NCCINCACAT CCCTGATTCC TGTGTATTATG GAAACTNNTG CCAGAGATGG
 AGGTTCTCTC GGAGTATCTG GGAAGTGTGC C

SEQ ID NO:2158: (Length of Sequence = 280 Nucleotides)

CAGCTCCTGA GGACCGCTGC AGTGATGACA CAGGACTATT GCATCAGCAT CGTGCTCACA GGAATCAGA GCTCAGCCAG
 GAGAGGTCCA AGAATGACAG AACCATGAGC ACTCCTACCA AAATCAGCT CTGCTCAGCC AAATCAACAA TTCAACCCAA
 CAGGCAACT CCTAACACAT CCCATCCAGA CAGACATTAG AGGCGCACAG CAGATGAACC TCCTACTTAC ACTGTCCAAG
 GAAGCTGGAC TATCAATTCC CAGTAAAAGT GGGGGAAAGG

SEQ ID NO:2159: (Length of Sequence = 342 Nucleotides)

CTTGTCGTT TCTCCTACCA GATTGTGCAT GCCTCCTGTG GGCAGAGCCT GTNCTGACTT GCTCCTGGGT CTCCAGCATC
 ACCCAGTCTG GAGCTGAGGA CCTGGGTACC TACAGATTTC CTTCCACACT GTCAGAATTG AGATGAAGGA AGCCAGAGA
 AATCAAGTAC CCTCCACCAG GCAGAGCAAA GTCCTGGGTG CCCAAAATCC AGGGAAGGCA AGGGCTGGGG GTACAAGCAG
 AGGATCTGAA GAGGTATATG AGAGTNGCCA GCACAGACCT GGCATAAGCT TGGTGCTCAG TGAAGGTTAC CTGATGTTGC
 TGGGCACCAG GGGTGATGCA GT

SEQ ID NO:2160: (Length of Sequence = 376 Nucleotides)

ATCTTAAGAC ACATATGGAA AACAATAGGG TAGAAGTTAG TAACTACAA GAATATAAAT TGGAGCTAGA TGAAAAGGCA
 GTGCAGGCAG TAGAAAAATT AGAAGAAATC CATTTACAGG TTAGTTTTTT AAATCAGGTA AGTTTATCTG TAATGTGCTT
 TCATTTATTT CACCGCAAAT TATATTTTGG ATATGTATAT ATTATGTTTC CTCTGCCTCT CTTGTAGCAA TTTGCTTTGT
 AGAGTCTAG AAAAAAATG GCATCTGTTT TTCTTTTAA ATATTACAT TTCCATTATT ATTATAACAA AATCAATCTT
 TCAGAGTAAT GATTCTCACT GTGGAGTCAT TTGATGATTG AGATCCAGTT GGCATA

SEQ ID NO:2161: (Length of Sequence = 404 Nucleotides)

CCTTCCTTCG GTTTCAACTG GACTTCTATC AGGCTACTT CCTGGCCCTG GCAGCTGATT GGCTTCAGGC CCCCTACCTC
 TATAACTCT ACCAGCATTG CTACTTCTG GAAGGTCAAA TTGCCATCCT CTATGCTGT GGCCTTCCT CTACAGTCTT
 CTTTGGCCTA GTGGCCTCCT CCCTGTGGA TTGGCTGGGT CGCAAGAATT CTTGTGCTCT CTCTCCCTG ACTTACTCAC
 TATGCTGCTT AACCAAACTC TCTCAAGACT ACTTTGTGCT GCTAGTGGGG CGAGCACTTG GTGGGCTGTC CACAGCCTGG
 CTCTTCTCAG CCTTCGAGN CTGGTATATC CATGAGCAG TGGAAAGGGC ATGACTTTCC CTGCTGAGTG GATCCAGCT
 AACC

SEQ ID NO:2162: (Length of Sequence = 339 Nucleotides)

CAC TGCCCTTT TTGTAGCTTG GGATCTAATT TGTAACACCT TGCTACCTAT GAAAGTGGG AATGTAAAAG GGAAAAAGCA
 ACTTGGCATT TACTAACTT AGGCTAACCA AAACCCCTG TAGAGATCCT TACTAGACAT GGGTGCAACA GCAAGCATCC
 CAGAGGACCC ACCACTGGGG TATGTTTATG GCCAATGGAG CAAATTCAAA TTTGGCTAAA AGAAGAAGAA ACTCATTTAG
 TATGGCAATA ATATTTGCGT TOGACACAAA GTGGCAAACC AACACATTTG GCCTAAACAT GGTTCATAT GTTATAATGA
 TACTTTACAA TTAGACTTC

SEQ ID NO:2163: (Length of Sequence = 285 Nucleotides)

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SEQ ID NO:2151: (Length of Sequence = 369 Nucleotides)

GTGCGCCCA GTCCTTCTGA AACCTGATAT CACACTTCGG GCACTGTCC CTCTACAGTC AATCTGTGTT TTCAGAAGTG
 GCCCCAGGTT CACTGTCTT ACAGCAGTCC TAAAGAGCOG GCTGCCCTTT CCTAGGCTT CCTTGCTCTT NAGGGCTAAA
 TTCCAGCCCT CTACCCAG TGCCACTTGG GTAAAAATAC TCTGCTCCTC TCAGTTTGC TAATAAGCCC GGGCTCCGAC
 TACCACCGTT CGGGGAAGG GAGCCCCCTA CGTCATTGC TGGGTCCGCT CCGGAAAAC ATGTGCCGGA CTTGACTTGT
 GCGGGGCGAT CTTTCCGAA ATGCCGTTTT TGTTCCTTC TAAGGGTGT

SEQ ID NO:2152: (Length of Sequence = 312 Nucleotides)

TTCAACAACA AATTGTGGGA GAAACACACC TTCCAGCAA TAGAAAATCT CTATAAAGTG CATTTGCCT GCAACCATCT
 CTCCCATG CTGGCCCTTG GGTGAGGATT TGAGGCACTG TTCGAGGGA GCCCTCAGGG CCACCTGAGC TGGGAGAAGG
 GAGGCATGAA GCCACCATGG AGCTCCAGGC TACTGGACAT ACCCTCTCTA CCTGCCCCTT CCTNITGGC TCCAGGAGTG
 CACTGCCTGA CTCCACTGGC AGGTTGATCT GGGAAACGGC TNGGCATGCT AGGGATGGTG GAGAAGTAGG CG

SEQ ID NO:2153: (Length of Sequence = 325 Nucleotides)

CCCAGACCA GAATGTAAAT NAGGCCAAAA TGCCACTTC CCAGGCTGAC ATAGAGACCG ACCCAGGTAT CTNTGAACCT
 GACGGTGCAA CTGCACAGAC ATCAGCAGAT GGTCCAGG CTCAGAATCT GGAGTCCCGG ACAATAATTC GGGGCAAGAG
 GACCCGCAAG ATTAATAACT TGAATGTGA AGAGAACAGC AGTGGGGGAT CAGAGGCGGG CCCACTGGC TTGCAGGGAC
 CTGGNGGCT GCACCAGTTC CAGTGACCAC TTCAGAACC ACCTNGGNGC ACCCCCCAAT GTGCTCTGGC AGACGGCATT
 GGCTT

SEQ ID NO:2154: (Length of Sequence = 326 Nucleotides)

ATCATTTAAT TAACATCTTT AAATGAAACA CAGTTTTCTT CATGTGCTC ACTCAGGCTT CAGGGCAGAG GGAATGGATT
 TTTAGACATA TCAAGACTC AAAAATTTAA AGAATATAT ATATGATAT ATATCTTCT AACATTTTAT GGAAATTTAA
 AATCAGAGGC TTTTGGTCTC TCCATTACT CTAGGTCAAG CTCATTTACC CCAGAGGACA AAGAAGGGCT GCCTCTCTA
 GACCCCTCCT TCTCCTTTGT CCTNIGTCC ACCCAGCAGG GAAACAAGCT CAGAAGGATC CTAACAGGAT AGAGTTTCCA
 GTAAAT

SEQ ID NO:2155: (Length of Sequence = 317 Nucleotides)

TGGATGAGGA GACCTGAAC ACACCTGCT ACTGNCAGCT GGAGCCAGG GCCTGTNACA TCCTGCTGGA CCAGCTGGGC
 ACCTACGTTT TCACGGGCGA GTCTATTCC CGCTCAGCAG TCAAGCGGT CCAGCTGGCC GTNTTGCCC CCGCCCTCTG
 CACCTCCCTG GAGTACAGCC TCCGGGTCTA CTGCTGGAG GACAGCCTG TAGCACTGAA GGAGGTGCTG GAGCTGGAGC
 GGACTCTGGG CGGATACTTG GTGGAGGAGC CGAAACCGCT AATGTTCAAG GACAGTTACC ACAACCTTGC GGGCTCT

SEQ ID NO:2156: (Length of Sequence = 372 Nucleotides)

CTCCAGCTG GCAGCCAGT GGCCACCCA TGTCAGCAC TTTCCAGTGG GACTCTTCAG TGGCAGCAAG GCCACCTGAG
 GCCCTGINTC CCAGCCACTT TCCCTCCTGG CACTGCCACC AGCCTCACCG AGTGGGCGA TCTGGCTCA CTGCAGCTC
 TGCCCTCCCG GTTCAAGCAA TINTCCTGCC TCAGCCTCCT GAGTAGCTGG GACTATAGCC GGTGCGGCC ATGCCAGCT
 AATTTTGTGA TTTTGTAGT AGACAGGATT TAACATGTT GGCCAGGCTG GTCTTGATTT CCTGACCTCG TGATCCGTC
 TCCTCAGGCT TCCAAAATG CTGGGATTAT AGGCATGAGC CACCACAACC GG

SEQ ID NO:2157: (Length of Sequence = 351 Nucleotides)

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CACGGCGTTG GTGCAGCCCC GCACGTAGAT GACATCCTGC AACTTGAAAC GCTCCTTGTC GATAGTTTTN TAGCCACACA
 TGGTGTGAC AACTTCTGTC GTGTTCTGA TGCAGCAGGT GTAGGGCACC CCACAGGCCA GGGGTCCAGG GGCAGTGCAG
 TCGTGGTACT GATTCTTGCT CCAATCTCGG TAGTCCT

SEQ ID NO:2145: (Length of Sequence = 420 Nucleotides)

CGCCAGGAGC TGCTAGCCAA AGCATTGGAG ACCCTACTGC TGAATGGAGT GCTAACCCTG GTGCTAGAGG AGGATGGAAC
 TGCAGTGGAC AGTGAGGACT TCTTCCAGCT GCTGGAGGAT GACACGTGCC TGATGGTGTT GCAGTCTGGT CAGAGCTGGA
 GCCCTACAAG GAGTGGAGTG CTGTCATATG GCCTGGGACG GGAGAGGCCA AAGCACAGCA AGGACATCGC CCGATTCAAC
 TTTGACGTGT ACAAGCAAAA CCTCGAGAC CTCTTTGGCA GCCTGAATGT CAAAGCCACA TTCTACGGGC TCTACTCTAT
 GAGTTGTGAC TTTCAGGAC TTGGCCCAA AGAAAGTACT CAGGGAGCTC CTTCGTTGG ACCTCCACAC TTCTGCAAGG
 CCTGGGCCAT ATGTTGCTGG

SEQ ID NO:2146: (Length of Sequence = 390 Nucleotides)

CCCAAATACT GTTTCCTAAA CTATGTCGGG CGGCCGAAGC ACATGCGGGT NATGGCTGGA GCCCTGGAGG GGGACCTCTT
 CATCGGACCA AAAGCAGAGG AGCACGGGG GCTGCTGACC ATCCGCTACC CCATGGAGCA CGCGTGGTG CGAGACTNGA
 ACGACATGGA ACGCATCTNG CAGTACGTCT ACTCCAAGGT TCAGCTGCAG ACCTTCTCGG AGGAGCATCC TGTGCTCCTC
 ACGGAGGCC CGCTCAACCC GAGTAAGAAC CGGAGAAGG CGGCAGAGGT GTTCTTTGAG ACCTTCAACG TGCCGGCCCT
 GTTCATCTCC ATGCAGGCTG TTCTCAGTCT GTACGNAACA GGACGCACGA CAGGAGTGGT TCTAGACTCA

SEQ ID NO:2147: (Length of Sequence = 219 Nucleotides)

TTTGTGGTGG GAGAGAACT GGTGTTCTGC CCGGCTCTGC TTGGTCACAG ACAGCTCCAG CAAGAGCAGT TGTAAAAGT
 GCCAAGCGTG TGTATCACTG TGACAAGCCG TTGCTTACT GCCCTGTTCC CTTCAGCCA AACCAGCTGA TGAAGAACTG
 CTGCCAGGNG GGTCTACAG CAGGTCACAA ATGACCTAGT TTCATTTTAA GCAGACAGA

SEQ ID NO:2148: (Length of Sequence = 353 Nucleotides)

GAAATCTTTA TTACAAAAT ATTTGCAAG CAAAAAGTT TAAGTTGCAA CTATATACAA AATGGGGCCT GTTTCCTTCC
 CAGCAGTCTT AAAATAAACT CTTGAAACCA TGCTCCTTCC GCAGGTGGT TCGACCTCTT CCTTTCTCTG GGGTCAATA
 CACAAGGTAT GTGGATTCTC CAGGTGCCA GGCTAAAGCT AAAGCTATAC ATCTTCTTGG GCCTTATTC CTTATTTCCC
 CCTCCAAGAA TTAATAAATA AAATAAATG AAAATGGCAC CAAGAAAACA TTCTTTTAAA ATACTGAATG TGTGTGTGCA
 TGCGTGTGCA CAGTATGTCC CTGTTCTCTG GGT

SEQ ID NO:2149: (Length of Sequence = 394 Nucleotides)

GGGAGACTT TGGGCTTTNN TCATGACTGT TTGGGTGAA GGTAGCTCAA GTGTGTGTGT GTGTGTGTGT GTGTGTGTGT
 GTGTGTGTGT GTATGTGTGT AAAGTGCTAA GAACTGTGCA TTGACATCCA AACATTTCTT GTACAAAAT TCCCTAGCAA
 AGCAAACCTG CTTTGAATTA ATTTATTTGT TAAATGTTGC ACTTTGTTTA TGTATGTTTT GTTTTGGTG GGGAAATAAGG
 AGAGAGAGGA CGACAAATTC TATTGAAGTA TTTATTTTGT GAAGATGGCA ATTTTGCAAT TGTTTAAATA TTTTTCATTC
 NNITAAATTT GTTATCAGTG CCAGCCCAAN ATACCTGCTC TACCATTAAT TTGCGGGCCT GATAAAAAGG GTCC

SEQ ID NO:2150: (Length of Sequence = 200 Nucleotides)

ACCTCCCTGG GCCTCGGAGA CGCTGACAGC TGGGACGACA GCAGCTCGT CAGCAGCGGC ATCAGCGACA CCATAGACAA
 CCTCAGCACT GATGACATCA ACACCAGCTC CTCCATCAGC TCTTATGCCA ACACACCTGC CTCCTCTCGA AAAAACCTGG
 ATGTGCAGAC TGATGCTGAG AAGCACTCAC AGGTGGAGAG

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SEQ ID NO:2138: (Length of Sequence = 305 Nucleotides)

ATGCTGAGTC GCAGTTCGA TGTTCTTATG CTTCCATCAG CAAATCTCAA TTTGTCAAGA TTCATGACAG ATTCTTCCCC
 AGCGTTTGGT TTAATTGGAG GGACTTTATC TCCAGGCTG CATGACTCTT CGATGCTCAG GGCACATGCC CGACCAAAGA
 CAACCAGGTC CAAGAGCGAG TTTNCCCCGA GCGGTTGGC ACCATGTACC GAGGCACAGG CGGCCTCCCC ACAGGOGTAC
 AGGCCGGGCA CAATCTGATC CTGGCCATTC ACGTGCTCA GGACCTGCCC CTGTAGTTG GTGGG

SEQ ID NO:2139: (Length of Sequence = 263 Nucleotides)

CGGCCCCAG CAACAGCTTC AGCCCTCTCC ACCAAGCTTG CCATCAAGGA GATTGCACCA CTGCACTCCA GCCTGGGTGA
 CAGAGTTAAG ACTCTCATGG GGACACTACT GTTCAAAAGG CCCTGGCCAA ATAACCTCCA AATGAAACAC TCAACCCAAG
 GATGTTTTCA GCCCACTGTT AGTGAAGCTG GGTGCAGAAT GCAAAGCCTC TAAAAGGAGA GGATACAAAG TCAGGTGAGT
 AGGGGCCATT GGCAATGCTC AGA

SEQ ID NO:2140: (Length of Sequence = 255 Nucleotides)

CTGCTTCANT CTGOGCCCT CAGCTGTGGC TTCCCGGCAT GCCCTGTGAC CCCAAGCCGC AGGTACAGGA AAGAAGTTTG
 TGCTGGGGGA CTCAAAGACC CAGAGGTAA TTAACAGGAA CCAGGGCCAG GGGCCTTCAT CTAGAGGTCA GTGGAGTCTC
 CAGGGCACTC ATCACTGTGG CTGGGAGACT ACAGTGTCTC GGCTGCGGAC TTGTGGAAGA AGAGGGGGAA GGATGGGAGA
 AGGGGTGACT GGATG

SEQ ID NO:2141: (Length of Sequence = 355 Nucleotides)

TTTAATTAAA TACCACITCA TAATGTTATT TGCACCTAGT ACTTTTTTTT TTTTAAATAA GACATGCCAT AAGTCGTGAA
 GTTAACAAAA TATAAGCATC CGCACAGAAT ATATTCTAAG GTGACTTCAT TTACACOGCT TCTCAGAGAA ACACACAAGT
 AACCTTTTGT CTGCCTATCA GCCAGTGTG AAACAGCTTT GGAATTCACA TGAAGGCTG CCGGGCTGCT TCCCCAACAC
 TNGCCTGATG GAGTCCTGTA TCCGNACCGT GCGTCAAAC TGGCTGGTTT CCACTAGAAA AGCAATGGAG AGTCAGCTCT
 CCCTTCTTTA CCCAGCGTTC AACTCCACAC TGCAA

SEQ ID NO:2142: (Length of Sequence = 391 Nucleotides)

CTGCTAAGTG CCATGAGACC TTAGCAGAGG CTGTGGGTGC CCGCCCCAT TCCCTCCACT CACTCTTCCT TGCAGGTGGA
 CCTGCCCTTC TTGTCTGAGG CCTTCTCTG CCTCCAGAGC CTGCTTGGTC CTCAGGCTGT AAGTGCAGGC AGAGCTAATG
 TCTCTCCATA GCTGCCCTCC ACCAGCCTGC TCTGAGACA CTTGCTGGCC AGCAGCCTGA AGCAGAATCC TTTACTCAGA
 TTCAGCGCA CAGATGCTCA CTGCAGAGAT CTCCAAGGNC TGTGGTCATC CTGAGCCCA TCTCAGATT GTGTGGATAG
 GGTGTTAGAG AACATGGAAT CAGCTGGATA GAGTGGTICA TGCTGTAAAT NCCAGCACTT TTGGGAGGCT T

SEQ ID NO:2143: (Length of Sequence = 326 Nucleotides)

GATGCAGAAC AGCTTCTTGC AGAAGCACCT GCTCCGGCAT CCAGCGCTGC CTGGAGGCAG GAAGGAGAGG CAGGGCAGGA
 CAGCTGGTC TGAGATGAGG GGGAGCCCCA CGGGCCCCAG GCAGGCTAGA GGAGGCACAG GCCCTGCCAC GGCCAACTCA
 GGTGAGCCAG CTTGAGGCTG TGGCCTCCAA AGGGTCTGGG CGCACCCCCC AGGTGCGAGG TMTNTGAGGC CAGCCAACCT
 GCAGAGCACT CGCGGCGTGG GTGGGCTGAG TGGAGGTGCC TGGGAAGCTG CCTAAATTCA GAAGCCTCCA CTTGCCATGG
 AGACTG

SEQ ID NO:2144: (Length of Sequence = 357 Nucleotides)

GCACCGGGCC CCAGGAGCCC ATCAGTGACA GAGTGCTCCA TGATGATGTC CTCCACCCGG GTGATGTACA GCAGGTCAN
 AGCACCCCCA GGAAGTGGGA NAGCAGGATG CCCAGGAGGA TGCCCGCCAT GATGGTGTAG TTGTCCATGA ACCAGATGAT

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SEQ ID NO:2131: (Length of Sequence = 280 Nucleotides)

CTGAGTCTTG TCGATCCCGA CCAGGAAGAG CAGCTCAGCC AGGAAGAGGT TGATGCACAG GTTCTTGTGG ATGGTGTGTC
 GGTCGGTCTG CAGCCCCCGC AGAAGCAGAA GGTGGAGATG CAGATGGCCA AGCAGACCAG GGAGATCACA ATGCCCCACC
 AGGTGATGAC CGACAGCAGC AGCTCGTTGA TGGGGCCCTG GTAGATCTCA CGGTGAGCCA TGAGCACAGC GAAGTTGGTG
 AGGTGGCTGC AGGCACACGT GGTATGGGTC TTGTGGACT

SEQ ID NO:2132: (Length of Sequence = 201 Nucleotides)

ATCCCCACAC CATGCTCTGC TCCTCCCATG GGGCTTTAGC TCCCCTGACC ATCTGCTCAT GTAGCCTCTG ACTGGGCGCA
 CAGTGGTGCA GGAGGAAGGA CCGGGAACCC TGTGTGGCTT TGGGCAAGCT GACAAACCCG TCTGGAATC AGTTTCCCCA
 GCTGTGAAAT GGGGCCAGTC CCCATGCCCT GCTGTCTCTC T

SEQ ID NO:2133: (Length of Sequence = 180 Nucleotides)

GATGAAAATG TTGTGACCAG AGGCTTGCCA TTNCCTAACT CTATTTGCCA GAGGAGCAAT AGTTCTGTAT TCGCTAATTT
 TGTGTTTACA GAGACTTTAA GGAACATGAC TGTGGGAAT AACAAGAATT AAAGGTATTT ATTTACTTNC TCTATATGAT
 TGTAATATTA TACCCATACT

SEQ ID NO:2134: (Length of Sequence = 302 Nucleotides)

ATGAACAAAC GGGACTATAT GAACACTTCG GTACAGGAGC CCCCTCTTGA CTACTCCTTC AGAAGCATCC ACGTCATTCA
 AGATCTGGTA AATGAGGAGC CAAGGACAGG ACTACGACCA CTGAAGCGTT CAAAGTCGGG GAAATCACTG ACCCAGTCCC
 TGTGGCTGAA TAACAATGTT CTCAATGATC TGAGAGACTT CAACCAGGTG GCITCACAGC TGTGGAGCA CCCAGAGAAC
 CTGGCCTGGT TCGACCTGTC CTTTAATGAC CTGACTTCCA TTGACCCTGT CCTAACAAC T

SEQ ID NO:2135: (Length of Sequence = 291 Nucleotides)

TCTTACCAAT CTGACATTCA CTATCAACCA CTCTTGACA CATGTCATAG AAAAGTGACA TCTCTTTCCC TTCAACCAAT
 ATATCTTCCA ACAACATCAA CCTCAACAGG TAGCTAGCAT TGCTCTCTGT TGAAATTTAG AGCTGGAAGA AAGGATTTCA
 CAATCTCTCT GTGGAGACCC AGGAATCCGT TACCTTCTGG GATTTTAGAG AGTGTGGAGA GAGATGAGCA GGCAGTGAGC
 CGGGGACCAA CTCCGATAAG AATATGAAGT CAGGAAGTGA GAGAGGAAAC G

SEQ ID NO:2136: (Length of Sequence = 282 Nucleotides)

GCTGTACAAG GTCTTTTCTT TTGTGTGTCAT GGTGATTTT GTACATTTC GCATTTGCAT CATACAAAGG GGGGAGCAAC
 AGCCATGGCT TTTGGTCAGG TTCAGGGGGG CTGAGGGGGT GCTCCTCCCC TCCCCCAGG CACTGACACA TTGAAAGGAA
 GCAGAGCAAC AATGACACAG CACGGATGTG GGAAAGGGGA TCCCCACGC GGGCAGGATG GTCCATCTCA CCGGGTCTC
 ACCAGGACTC CCGCTCCCCA CCCAGGGCCA GCACGAGCAC CT

SEQ ID NO:2137: (Length of Sequence = 322 Nucleotides)

GAATTGACAA CATATTGCCA AAATCTTAGT GGATTTTGCC AACACTATTC TGCTGATAGG AAAAAAGAAT CATTGAGCTA
 CTTTCCAATT TAGCCACAAA ATAGGCTCTT TTTCTTTCAT TACTACTTIA ACCAGTATGT TAATACTGAA AATAGGTATA
 AAGAAATCAC AAATAACCTT CTTCTGTTG AAGGAAATTT AAAATAGCAC ACTTAAATTG AAAGINAAGG GAACTTTAAT
 TCACTACTGT AATTTTAA TGTCTGTATC ATGTAGTGTG TGCACAGTTT TAACCTTAGT TTACCATCTC TTACTCCTTA
 GT

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TTGTTCCTT GCCTGGAGTG AAGTGGCGCC ATCATAGCTC ACTGCAGCCT CGCCCTCCTG GGCTCCAGCG ATCCTCCCGC
CTCAGTCTCC CGAGTAGCTG GGACCACTG CGGATGCCG

SEQ ID NO:2124: (Length of Sequence = 233 Nucleotides)

GAAACGCGT GCATCTCTTG TCTGTGGCA GCGAGCACAT CGTNTGGAGA CACGAGTTTC TAAGCAGCTG GCACGAGGGC
TGCTGACGGC ATGGGTCTG CTTGAGGGTG GCAATACCTC TTAGGAACCT AGGGCAGGAA GCAATACCTC AGCATTGAAT
GTGTGTAAAT AGTTGCTTTG AGTTGCAATT GCTATTINCT TCTCAGTCCC AGCTCAGATC GAATTATATA TCC

SEQ ID NO:2125: (Length of Sequence = 241 Nucleotides)

GCCATGGCTT TTGGTCAGGT TCAGGGGGG TGAGGGGGTG CTCCTCCCTT CCCCCAGGC ACTGACACAT TGAAAGGAAG
CAGAGCAACA ATGACACAGC ACGGATGTGG GAAAGGGGAT CCCCCAGCG GGCAGGATGG TCCATCTCAC CGGGGTCTCA
CCAGGACTCC CCGCTCCAC CCAGGGCCAG CACGAGCACC TCCCGTTTTC TCCCCAGTGC AGAGCGTGGG GTGACAGGAG
T

SEQ ID NO:2126: (Length of Sequence = 275 Nucleotides)

GTGTGCCCTC TTGCTGTGTC TTAATTCATA AGGAGTTGTA TCTTCCACC TGCATTTCAA TACTGCCGGT TAGGACCTAA
GTAGAAGAGC AGTAAAGGCT GATTGACACA CAGGGGGATG GAGTTGGTCC TTGTCCATTC TCTACCCCTT GCTGTGCATG
TATCAATCCT TATCCAGAA GGTACTATTT AGACTGTATA GACTGATTTA GATTACATAC TTAGAGGAT TAAGGAAACC
ATAGAGTTTG GGCCTTGGA CTGTACTGCT CTGT

SEQ ID NO:2127: (Length of Sequence = 296 Nucleotides)

TTCAGCCTTA TCGAAACACA TGAAGCAAAA CCATTGAAAC TGTATGTGTA CAACACAGAC ACTGATAACT GTCGAGAAGT
GATTATTACA CCAAAATCTG CATGGGGTGG AGAAGGCAGC CTAGGATGTG GCATTGGATA TGGTTATTTG CATCGAATAC
CTACAGCCCC ATTGAGGAA GGAAAGAAAA TTNTCTTCC AGGACAAATG GCTGGTACAC CTATTACACC TCTTAAAGAT
GGGTTTACAG AGGTCCAGCT GTCTCAGTT AATCCCCCGT CTTTGTACAC ACCAGG

SEQ ID NO:2128: (Length of Sequence = 322 Nucleotides)

GCATGGGAGG GAGGAAGAGA GGTITGGGGT GCGGTGGCAG GTGATATAGG GAAAGGGCTC ACGTTTCAGA ATCTGTGAAC
AATTCATTT TTCATCAGAT AGCAGAACAA CTACAACAGC AAAACCTAGA ACATCTCAGA CAGCAGCTCT TGGAGCAGCA
ACAGCCTCAA AAGGCCACTC CTCAGGATAG TCAGGAAGGA ACCTTTGGGT CAGAGCATTG AGCGTCACCA TCACAAGGGA
GTAGTCAGCA GCATTTTCTT GAACCTGAAG TCAATTTGGG ATGATTCCAT AGATATTGAG CAACAGGATA TGGATATAGG
AT

SEQ ID NO:2129: (Length of Sequence = 222 Nucleotides)

TTTAGTGGGT CTGGGGTGGG CGCGGCCCCC GGCTAACGGG GCGGGTCTCC TCCTCTAGGC GCAGGAGTGC GCGGTGCTCT
CCAGGCCTCC CCGCTAGGT GGAGCGTGAC ACGCAAAGC ACACCGTCT ACCGAGGCGG GGCCAGGCG GCACCAGCCC
CTCCCCAGAT GGAAGTGCCC GGCAGACAGC TGCCCAAGAC CTCACAGAAC AAAGATGGAC AT

SEQ ID NO:2130: (Length of Sequence = 191 Nucleotides)

GTGGGATGCT TTATTTCACT GTGGCGGGGA GGAACCTGG ACAGGGGGCG GCAGGCGGGG TGGNGGCTG GCACTCAGGC
GGGGACTAGG CAGGGGAAGG GCTGCCCCCA GGCCTGTGTA GGAGAACTN AGGCCAGCCC TGGCGGAGAC CTAGCCACG
GGGTAAGGA GGGTGGGGGA AAACCTGGTC T

SEQ ID NO:2116: (Length of Sequence = 153 Nucleotides)

AAGAAGCGAA GAGGATTTCGT GAGCTGGAGC AGCGCAANAC ACCGTGCTGG TGACAGAACT CAAAGCCAAG CTCCATGAGG
AGAAGATGAA GGAGCTGCAG GCTGTGAGGG AGAACCTTAT CAAGCAGCAC GNGCAGGAAA TGTCAAGGAC GGT

SEQ ID NO:2117: (Length of Sequence = 231 Nucleotides)

GAATATAATG TGTATCINCA AGGTCGATC CACCCTTNCC CATCCTNTGG AGCTCAGAGA TTCTTGGGAG CTGAAGGTCT
TCTTAATGTC AGATCAGCAA CCCCAATCTC AGGCAGCTCG GATTCGCTGC TCTCGATCTN CCGCTGGCCA ATGTAAAACC
AGACGCAGGC GACCCAGTGC GCGACAGGGC GAACACGGCC ATGAGCAGTG TCAGCACCAC GGCGCTGTAC T

SEQ ID NO:2118: (Length of Sequence = 309 Nucleotides)

CGGGAAGAA CAAATTGGAA TGGTGGGGGA TATGGGTGTG TGGTGGGGGC GGGGCAGGAG GTCCTCCGGG GTCCAGCATG
GGTCGGGAGT GGGAGCAGGA CAGAAGGTGG CCACGTCACA GGCGACTGAT GCTCAGCTCA AGGGGAGTGT GAAGAGGTTG
GCAAAGAGCT GGGGAGCCGG GCAGAGGGAC AACACTGACT NAGGACATTN CAGTTGGGAA TCAGAAAAAA AGGGGCAGCT
CAGGGGCATC TGATCTGCCT CATTTTGA AAGAAACAG AGTAATGTAC AAAATTCTGG ATATCTTCT

SEQ ID NO:2119: (Length of Sequence = 308 Nucleotides)

GGTAATCGTT GAAGATTACC AAAGGTTTAT TTGGAATGAC ACAGCACTGA AAACATAATT GTTACAGATG ATTTGTGGAT
ACAGCATACA CCATCTATTT TACTTTAGAA CAATCTGTGA AGATGAGTTG CATAAATAGA AAGAGGTGGA AATATAGAGG
AGCTGTTTTT ATAGTGTCT TTTGGGGTA GATGAATATG CCCATCTTT CTACCCAATC TCATAAAGGC AGAAGAGAAG
ACTGCTTAGC TGCCCATCCC AACTAGCCTA CTTCCAGCCA CAGCGGCTGG ACAGCTAGAT AAATCAGG

SEQ ID NO:2120: (Length of Sequence = 237 Nucleotides)

CGCTCTCCT GACGGGAGCC CACTAGGGGG TCTCTTTTCA TCTTTGGTGT GGCCTTACCT CCCACCAAAG AGATCCGAGG
CTTACTCTTC TCTCTCTGG ACCAGCATGA CCAGGAGTC CTTCCAGGAG AGCTCTGTGA AGGAGCTGAG GCGGCTGGAG
GACCAGCTGG CCGGCCTGCA GCAGGAGCTG GCGGCTCTGG CACTGAAGCA GAGCTCGGTG GCGGAAGAAG TGGGCCT

SEQ ID NO:2121: (Length of Sequence = 224 Nucleotides)

GCGGTCAGAG GCTGAGGCCA GAGAGGTAGC AGCGGAACIN ACAGGGAGGC CAGGGGCAGA GCTGACCCTG GAGAGGGATC
CTNATGTCCT AGACACATGG TTTTNTCTG CCTGTTCCT CTTTNTGCC CTGGGCTGGC CCCAAGAGAC CCCAGACCTT
GCTCGTTTCT ACCCCCTGIN ANTTTTGAA ACGGSCAGCG ACCTTCTGCT GTTCTGGGTG GGCC

SEQ ID NO:2122: (Length of Sequence = 202 Nucleotides)

CAGCTGCAGC TTCCAACCAA GAAAACCTCA AAGCATTAGG GAAGGAGCAG GTGTGGGGCT GGGGTGGGGA GAATCCCTTA
AGCTCCAGGG CCCAGGGTCT AACCTGAGAG GTGGGGCTG CAGGAAGCTG GGGGAGGCTC CCGGGGCTGG GGAAGAGGA
GCCTGCCCCC AGCAGAAACA GCAGGTCTCA GCGGCTACAT GT

SEQ ID NO:2123: (Length of Sequence = 359 Nucleotides)

ATTCTCTCT GTTCTCTTGA TGTGTAGGGA AATTGAAGA ATGACTCTGA TAAAAATCTA AAAGAGAAAC ATCGAATCCT
AACTGGCTGT GTGACCCTAA AACCTTACTC CGTCTCTTTG AACCTCAGAT TTCTCAGGGC TTGGCACATA GCAAGCATTT
CATACTCAGA AGCTGGTACT ATTACTGTTG TGTTTTGTGG GGGGAGGTTT GTTGTGTTTG TTGGAGACA GGATCTGGCT

SEQ ID NO:2109: (Length of Sequence = 329 Nucleotides)

TTTTCATGGC AGCCTGAGCA GACTAAGACA GCAGCTAACA CAGCAAGATC ATACCAGTTA ACCTTCCTGG TTAGAAGACC
TGAGCCTCCT GACTTCGGGT CACTGGATAC TCTCTGTIAG GCTCATGATT TAAACTCTGT AGTCACTGCT GGCTTGGAAA
CCTCTAACTC TCTCTGCCTC TTGACAGTGT TCCCTCAAGG GAGTCCATTA GCCAGGACTA GGTACATGC CCTGTGTITA
GCTGTGAGGG ACAAGGCAGA GAAATAACTG CCCAAGTTCA GCTTCCCATA ATGTTTGGGG GATGCTATGA CTCAACTTTG
ATCTATTTT

SEQ ID NO:2110: (Length of Sequence = 271 Nucleotides)

GGCTTGAGCA GACAGAACGG GGAAGACTCC ACTCTGTCCC GAGGGGCCAG CCGCAGTTGG CCCAGGGCCA CCTGCCCCG
AGGTCCTTGT GTGGCCGCC TGGCTTGGCA GCCCTGCCCA CGCTGCCCC GCAAACAATG GTGTGTGCGT TTTTACAGCC
CTTTTATAGG ACCCAATATG GGCATAAATG TAACACCTGT AGCGGGGSCA GATCTCTGT ATGTNCAGTT AACAAATTAT
TTGTAATGTA TTTTITTAGA AATCTTAAAA T

SEQ ID NO:2111: (Length of Sequence = 315 Nucleotides)

GGCTTGAGCA GACAGAACGG GGAAGACTCC ACTCTGTCCC GAGGGGCCAG CCGCAGTINC NCCCAGGGCC ACCCTGCCCT
GAGGTCTTGT GTGGCCGCC CTGGCTTGGC AGCCCTGCCC ACGCTGCCCC CGCAAACAAT GTGTGTGCGT TTTTACAGC
CCTTTTATAGG AACCCAATAT GGCATAAAT GTACACCTGT TAGCGGGGSC AGATTCTCTG TATGTNCAGT TAACAAATT
TTTGTAAATGT ATTTTITTAG AAATCTTAAA ATTGCCTTTG CACTGAAGTA TTTTCATAGC TGTITATATC TCTTT

SEQ ID NO:2112: (Length of Sequence = 275 Nucleotides)

GCAAGANAGA CCAAACCTA ACCTGAGTTA CAAGAAACAA GACAGTAATG GCTATAAAGG GAGTGACCAG GAGCAACTGG
GACACTCCTT TACCTCCCAT ATCCAATGTA TGTNTTTCAC AGAAAAACAA CAAAATTAAC AAATTCACAA AATACAACAG
CTAGAATTAC AAAATCCATT CATCCAAGGG TGGTAGAAGG CAGGATGNA AGGTGGAAGG GTAAATNGCA CAGGGAGAAA
AACAAAGTGT TCCAATCAGT CCAGGCACAG GGAAT

SEQ ID NO:2113: (Length of Sequence = 227 Nucleotides)

GGCGCATCAG TGGGGGGTGC TGTCAAAAT AGTGAAATCA GATACAGTTG ATGGGCAGGG AGGGTGGGGT AAGAGACAAC
TCCAGTGCAG TGCCAGGTGG GCAGGCTCCC ACTGTTCCTT TGAGACGCTC CTCCCCACTC AGGTGGGGAC AGGGGACACA
CTCGCAGGGC AGGGCATTCT GGAGGTGTGG GTACAGGTGA GGGGAAATGG GAGGCACAGC CAGGAGT

SEQ ID NO:2114: (Length of Sequence = 339 Nucleotides)

GGCGCATCAG TGGGGGGTGC TGTCAAAAT AGTGAAATCA GATACAGTTG ATGGGCAGGG AGGGTGGGGT AAGAGACAAC
TCCAGTGCAG TGCCAGGTGG GCAGGCTCCC ACTGTTCCTT TGAGACGCTC CTCCCCACTC AGGTGGGGAC AGGGGACACA
CTCGCAGGGC AGGGCATTCT GGAGGTGTGG GTACAGGTGA GGGGAAATGG GAGGCACAGC CAGGAGTGGG GCAGGAGGGA
AGGCCAGTTC GTNGGCAGGC TGAGGAGGGA ATATNACCCC CCTCAAGTCC CCAAAGTGGC AGGCAAGTTA AGGGGCCCTG
GATGAGGTGG CCCCTCATG

SEQ ID NO:2115: (Length of Sequence = 262 Nucleotides)

TGGAACACAA AATCCCTGT NTAAACATTG TACATTGGG GCTTAGCTGC CCTTGAGGAT GTCTAGTTA CACCCTCTCT
GATACCTGTG GAGTTTAAAG ACCATTCCTA CCGCTGTGTC CCTTNGGAGG GGGTGCAGTG GAAGCTCTTA AAGGGGAATG
CTTGCTCTGC CTCGTGGCT TTTTGTITGG GAAAGGGAGT TNGGATTNGA GGATTTAGAT TTNAGGTCAT GATGTCAGAG
CACACCAGGA ACTCCAAGG CT

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TGGTGCCAC GCATAGACTT CCACAGAACT CTTCAAAGCA ATCACCAGAA ATTTGATTCT TTCATATTTT ACAACTTTAT
AAT

SEQ ID NO:2103: (Length of Sequence = 270 Nucleotides)

CTTTTCACTC CCCCGCCCTG GGCTCTGCT CTCTTGCCCTG GNTTCCTTCT TTTTGTAGGG AAAGAGGGTG GGGCTGCAGG
CAGTCTACTG GCAGGACGGG AGGCTGAGTC CTCAGGGTCT CACACCCTCA GTGCTGATGC CATGCCAACT GCCTGGGACA
ACACCAACAC GTAAGGACCT AATTAAACCA AACCAGAGTC GGGTGTAGAC CAGCCCTGGG ATTTCCAGCT NTGACTNGGC
CAGGGCACAC GTTGGTCTCG GCAGTGGCTG

SEQ ID NO:2104: (Length of Sequence = 367 Nucleotides)

CTTTTCACTC CCCCGCCCTG GGCTCTGCT CTCTTGCCCTG GCTTCCTTCT TTTTGTAGGG AAAGAGGGTG GGGCTGCAGG
CAGTCTACTG GCAGGACGGG AGGCTGAGTC CTCAGGGTCT CACACCCTCA GTGCTGATGC CATGCCAACT GCCTGGGACA
ACACCAACAC GTAAGGACCT AATTAAACCA AACCAGAGTC GGGTGTAGAC CAGCCCTGGG ATTTCCAGCT GTGACTGGGC
CAGGGCACAC GTTGGTCTCG GCAGTGGCTG TAAGGTACCC TTCCTTNCCT TGGATGCTGG TTTCAACCAT CTATATATGG
CATCCACGCA TGGGATCTGC AAGCTGGAGC CCTCCTACCC GCAGCTT

SEQ ID NO:2105: (Length of Sequence = 288 Nucleotides)

GCAAAATTAC TGAACTACT ACTTTGGGCT CAGAACGAGC TGGACCAGAA GAAAGTAAAA TATCCCAAAA TGACAGACCT
CAGCAAGGGT GTGATTGAGG AGCCCAAGTA GCGCCTGCNC TTGCTGTTGGT GATCCAACAC CAGCCCTGGG TCGTGGGACT
TGCCTCANAT CAGCCTGCGA CTGCAAGATT CTACTGCAG TAGAGAACTC TTTTCTCTCC TTGTACTTTT TTTTGACCTG
GNATCTTTTT ATAGGGAAAA ATGGCCTTTG TAGGCAGTGG AAAACTTG

SEQ ID NO:2106: (Length of Sequence = 349 Nucleotides)

GCAAAATTAC TGAACTACT ACTTTGGGCT CAGAACGAGC TGGACCAGAA GAAAGTAAAA TATCCCAAAA TGACAGACCT
CAGCAAGGGT GTGATTGAGG AGCCCAAGTA GCGCCTGCNC TTGCTGTTGGT GATCCAACAC CAGCCCTGGG TCGTGGGACT
TGCCTCAGAT CAGCCTGCGA CTGCAAGATT CTACTGCAG TAGAGAACTC TTTTCTCTCC TTGTACTTTT TTTTGACCTG
GCATCTTTTT ATAGGGAAAA ATGGCCTTTG TAGGCAGTGG AAAACTTGCA AGGAAAGCTG CCGTCTCTTT TGGCAGTCTT
GATGCAGAGC CTGCACTCTG GCACTCGCT

SEQ ID NO:2107: (Length of Sequence = 329 Nucleotides)

GTGACAAGCT CCAGAAGCCC GCNTCGCAAC ANCCAGGAGG GCCAGGCCAC TCCAGGCAGG AGGCAGTGGG CTGGCAGCCA
CCTTGGGCAC AGAAGAGCAG ACGCAGACAG TGCTGGGCAA CGAGGGGCTT TTTTCATGGG CCGCCTGCC CTGTCCCTCC
CCCCAGGTCC CCACCTTCTA GGGTTAAAGT GCAGCTGGGA GGGAGGAGGC AGGCAGAAAT NGGGAGCTAG AGAGAGCCCA
AGTGAACCTT GACTGTCCAC GCAAGTCCA TGCTCTCTC GTCTGGAGT TCCTCGAGGT TCAGCGAGCC CATCCCGCCT
AGGGCCTCT

SEQ ID NO:2108: (Length of Sequence = 261 Nucleotides)

TTTTTATGGC AGCCTGAGCA GACTAAGACA GCAGCTAACA CAGCAAGATC ATACCAGTTA ACCTTCCTGG TTAGAAGACC
TGAGCCTCCT GACTTCCGGT CACTGGATAC TCTCTGTAAG GCTCATGATT TAACTCTGT AGTCACTGCT GGCTTGAAAA
CCTCTAACTC TCTCTGCCTC TTGACAGTGT TCCTCAAGG GAGTCCATTA GCCAGGACTA GGTTACATGC CCCTGTGTTA
GCTGTGAGGG ACAAGGCAGA G

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CTAGATATAA CTACCCCTCT CTATTCCTCA CCTAAATCCT TATACTGCTG ATGACTTTGG AAAATAGTAC AGGGTTTTAC
 AGTCTAATCA TGACAATACA TCTCCAGGNT CCTTGAGCCA AATACATTCC TCAGAATACT TTTTTTAAAA AACTGAAATT
 GATTACTTGT ACTTTGTTCAT CACCAAAAAT ATCTGTAGCA AGACATACTG TTCTCAGCAT CCACTTCTAC CATCCTCACT
 ATTGTAACTC ACAGTAGACT ATGCCTCCTA CTTTACTGAA AAGATACAAA CCATTACCTA GCAATCATTC TTCCACCTTA
 AACATAT

SEQ ID NO:2097: (Length of Sequence = 296 Nucleotides)

CACCCCTGCTG AGGTCAATTT CGTCAGTAT GCCTCGGGTC ACATAGGCCC TGATGACCCA GATTTTCACAC AGAGGTCACT
 ACATCGGTCA ACTTTCCTCC CAGGAGGGGC CGGGGCTGGT GGGCCATGCC CACTCOGTGC CACATGCCA GCATTCAGAG
 CTTTGTAAAG AAGCCCTGTT CTAAATGCTC AGGTCCACC CTTCTTGTG AAGAGAAGCC ATGGGCTTCC TGCTCCTGTG
 TCACAGTGTG CCACTTGAAG GGTGGCTCTT CCCCATCTT CTTCCATGGG GGCCAG

SEQ ID NO:2098: (Length of Sequence = 324 Nucleotides)

ATTGGTITIN TTGAGTGTG TCTTCITTTT NITTTGTTTC AACATACTTA CTGGTATAA AGTCATGCAA AGAAAACAGT
 GCAGACAGTA GATCCTAGTG GATGTGCCA GGTATTCAC TCAGAGTCAA TCCAGGGAA AGAGGGAAAG AGGAAAGAA
 AGAGAGAATG CGAACCGAG GCTGCAGGAT GAGGCATGAA GAGTAGAAT TCCAGTGTG TTGCTGTGGT CATCAGACGC
 CAAGGGGAGA GAGGCAATNA AGACACACGC TCACGGGCC CCCAGAGGTG GGTGGGGGGT GCTGGGGGGC GGCACACAGA
 TATG

SEQ ID NO:2099: (Length of Sequence = 299 Nucleotides)

GAAACCGTCA GTAAGGAGCT CTTTATCTTT ACCTTCCCAC TCCAAACCTA CTGCTAGCT GTTCTTATCA TTGCTCCTT
 TTTCTGTGC ACAAAATGT GTTCCATCTT AATGAACACA TTTCATTAT GTCTTCTTA ATGAAGGACA GTCCCTTTCC
 CTGTGCTGTG AATCCCATAG TAATGACATT AGCTTAAGTT TTCTGAGCAC TTGCTATCTG CCAGTTCTC CCATGAATTA
 TCTTGCTTAA GCTTTGCAGT ATACCTGTGA AATAGGTGGC AGTAGTTGTC CCACCATAC

SEQ ID NO:2100: (Length of Sequence = 308 Nucleotides)

GGCAGCTTAT TTGGGATGG TTCACAATGT GGATCAAACA GGAAATCTG TTATCATCAA CAAGACCAGC AGCACCAGAA
 TNINCCGAGT CTTCCAGCAG TGCAGGCTCC TCAGGNTCC TGTCCCGCAC CCATCCACCT CTCCAGAGCA CACCCCTAGT
 CTCAGGTGTG GCAGCTGGCT CTCCAGGCTG TGTGCTTAT CCAGAGAATG GAATAGGGGG CCAGGTGTCT CCCAGCAGCA
 CCAGCTACAT CCTCCTTCCA CTGAAGCTG CAACAGGCAT CCCGCTGGG AAGCAATCCT TCTTTAAT

SEQ ID NO:2101: (Length of Sequence = 291 Nucleotides)

GATGATGATT GCATGGGGTT TGATGCTACA CTGGATCATA GAGTGTGGGT TCTTCTTAC ATGINTTGGT AGATAAATGT
 CATAGACTGA TCTGAATCC ACATCAACAG CATGGAATCC AGCACAGGAT CCATAGATCA CTTTCAACCT CTGGCCTTCC
 TCAACAGTGA GATCCACCAG TAATGGCTTA TGTACCAATT CTCCAAATGA CTTAAAGGCC ATAAATTTGG TGATATGGCT
 TTGGNGCCCA CGCATAGGAC TTCCACAGAA CTTTTTCAA GGCAATCACC C

SEQ ID NO:2102: (Length of Sequence = 323 Nucleotides)

GATGATGATT GCATGGGGTT TGATGCTACA CTGGATCATA GAGTGTGGGT TCTTCTTAC ATGINTTGGT AGATAAATGT
 CATAGACTGA TCTGAATCC ACATCAACAG CATGGAATCC AGCACAGGAT CCATAGATCA CTTTCAACCT CTGGCCTTCC
 TCAACAGTGA GATCCACCAG TAATGGCTTA TGTACCAATT CTCCAAATGA CTTAAAGGCC ATAAATTTGT GATATGGCTT

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GGGGCTATCA GCCATGGCGT GGTGGAGGTG GACCCCATGC TGACCCTGGA GGAGCAGCAG CTCCGCGAAC TNCAGCGGCA
CGGCTATGAG AACCCCACTT ACCGCTTCCT GGAGGAACGA CCCTGACCCG G

SEQ ID NO:2090: (Length of Sequence = 293 Nucleotides)

TTATGTGGAA TACCACACGC CCTGGTACAT GGCTGAACTC TTCCCCCTTCA TCCTGCTTGG GGTCTTCGGG GGCTTGTGGG
GAACCCCTCTT CATCCGCTGC AACATCGCCT GGTGCAGGAG GCGCAAGACC ACCAGGCTGG GGAAGTACCC GGTGCTGGAG
GTCAATTGTG TGACTGCCAT CACTGCCATC ATTGCCTACC CCAATCCCTA CACACGCCAG AGCACCAGCG AGCTCATTTT
TGAGCTGTTC AATGACTGTG GAGCCCTTGA GTCTTCCCAG CTCTGTGACT ACA

SEQ ID NO:2091: (Length of Sequence = 274 Nucleotides)

CTTTTGGAAAT GGTCAAACAA TTTAAGTCAA ATGTTTAAAT GGTCGAATTA AAATAAGGGT TCAAACATGT TTTCAATATA
TTAATTNCTT TAAAGTCATG TTCAGGCAAG GTGCTGTTTA AAAAACCCT ATTAGCTTIG TCCACACATG TAAGTTATCA
AAAGTACCA AGGTAATTTT GACGTTGAAT GCAGCTTTAA ACAATAAAAA AATGGTATTA GGTTFACCTC TCGAAGCAAA
GAGAGCCCC AACCTTGTA ACTAAACATT CTGA

SEQ ID NO:2092: (Length of Sequence = 290 Nucleotides)

GGTACGTAGG ACGCTGGCCC TGTCCTCCGG CCGGNTCTGG TCAGACACAA TCATGGTCTC CACCACGAGG TGTGCAATGC
CTGAGAGGGT GGTTCGCTCC AGGTCCAGGA GGGCAGATCC ATGGGCGATG GTCCTCCTGA GCTCCAGAAG GCTACGGAAG
GAGAGCGAGG CAACATGGGG CTTCCCCCAG CGCTCCGTCT CCTCTCCAC GTCCTCCTCA AACTTGATCC AGCGGGCCGT
CTCCCGCCAG TGGGGCTCCT GGCTGCGGTC CAGCATCAGC TCGTTCAGCT

SEQ ID NO:2093: (Length of Sequence = 323 Nucleotides)

AGCTACACTG ATACAAGTGG ACCTAAGAA ACGAGTTCCG CTACTCCGGG ACGAGACTCC AAAACCATCC AAAAGGGATC
AGAAAGTGGG CGTGGGAGGC AGAAATCTCC TGACACAGT GACAGCACAA CACAGAGAAG AACTGTAGGC AAAAAACAAC
CCAAAAAGGC TGAGAAGGCA GCTGCTGAAG AGCCTCGTGG AGGCCTGAAG ATAGAAAGTG AAACCCCTGT AGACTTGGCT
AGCAGCATGC CCTCCAGCAG ACACAAAGCA GCCACCAAAG GCTCAAGGAA ACCCAATATA AAGAAGGAGT CTAAGTCTTC
CCC

SEQ ID NO:2094: (Length of Sequence = 255 Nucleotides)

AAGGATGTTT TGGTCCCTG CCTCAAGGCC GGCCATGTGG GAGTTGTATC TGTGGAGTTC ATTGCCCCAG CCTTGGAGGG
AACGTATACT TCCCATTTGGC GTCTTTCTCA CAAAGGCCAG CAATTTGGGC CTCGGGTCTG GTGCAGTATC ATAGTAGATC
CTTTCCCCTC CGAAGAGAGC CCTGATAACA TTGAAAAGGG CATGATCAGC TCAAGCAAAA CTGATGATCT CACCTGCCAG
CAAGAGGAAA CTTTT

SEQ ID NO:2095: (Length of Sequence = 305 Nucleotides)

GCACTCCAGC CTGGGCAACA AGAGCGAAAC TCCATCTCAA AAAAACAAG AAAGAACTN CTGAAGTCGG GGGCTGCTAG
AGGATTTTCA GGAAGGGTCA ACACAGGCCT CACTTCCAGT CCTCAITTC CCAGCTCACA GAGTCACCAG AGGGTGAGAA
GCAGAACGTG CCAGCAAAGA GGGAAAAGGC CACAGAACCA CCTINTCCTC AATTACAAAG GGGTGCAITT CAGAGGAGGG
AATAGGGATG GAGAGGAGGA GAAGACCTGC CCAGGAGCCA GATAAATTCA AAGTCACCAA GATGG

SEQ ID NO:2096: (Length of Sequence = 327 Nucleotides)

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SEQ ID NO:2083: (Length of Sequence = 257 Nucleotides)

AGTTTCATAT GTTTATTAAA CCAAGCATGA GGCCCTTCTG TGCACAGGGC CCTGTGTGAC GGCATGGGAG GCGTGCTCAT
 GAGGCTGGGC GTGCCCGCCA GAGACCTTTC TAAAATGCAG ATTCAOACT CTCCTCCTCA AGCCACCCTA GTGGCCAGTG
 GGGTCATTTT GGATCAGAGA TTCCTGGAAT AGATCTAACT AAGATGGTAG ATATTATTTT AAATAATGCC TTTTINAGGA
 ACTAGCTGCT AGGCTCT

SEQ ID NO:2084: (Length of Sequence = 255 Nucleotides)

TATTATACAG CATGTCAAG ATTATTTGAC AAAAGGCAGT AACAAGCCGA AGGAAAACAC ATTTACAAGA AGCTGAACAA
 CTTGTATCAG AACATACATC AAGGTGAAGA GTTTCGGCCC TCTTGGTATA GGGTATGTAT GTGTACATCT CCAATTTTGA
 ACAATGATGA CATAAGNCT AATACTCTAT TTATTCAGGN GACCCATAA TCAGGATAAT AGTAGGCATT CAGAGTAATA
 AAGTGATCAC AGTTG

SEQ ID NO:2085: (Length of Sequence = 290 Nucleotides)

GGACGCACGC TCGCTGCCAT CACCGCTGGG TGGTTTTTTC CCCCTAACTT TTTACTTAGC CTTTTTGGTT TGTGTCCCA
 CCCCCACCTC CTCACCCCTT TTCCAGTTCT TCTTCAGGCC CCTCCAGAC GCACCCAGC GGCCCTGCA GCCCTGCCT
 CCAGCCTCA GCCTCACCTT TGTGCCAGA CTGCAATTG GAAGACTCCA CCTCCGCCC AGGCCTGGGC TGTGGGCGG
 TTGGAGATT AGGTTTAAAT CCACACAAGC CCCAGTGAGG GGTAAGCAT

SEQ ID NO:2086: (Length of Sequence = 342 Nucleotides)

AGTTTCATAT GTTTATTAAA CCAAGCATGA GGCCCTTCTG TGCACAGGGC CCTGTGTGAC GGCATGGGAG GCGTGCTCAT
 GAGGCTGGGC GTGCCCGCCA GAGACCTTTC TAAAATGCAG ATTCAOACT CTCCTCCTCA AGCCACCCTA GTGGCCAGTG
 GGGTCATTTT GGATCAGAGA TTCCTGGAAT AGATCTAACT AAGATGGTAG ATATTATTTT AAATAATGCC TTTTINAGGA
 ACTAGCTGCT AGGCTCTCTA TCCTGGGAGA AGAAGGTGAA GGTTCCGCA TATCAATTTT CCAACTCAG CCAAGATTTT
 CCCAGCATCT NCAGGACAAG TG

SEQ ID NO:2087: (Length of Sequence = 306 Nucleotides)

TATTATACAG CATGTCAAG ATTATTTGAC AAAAGGCAGT AACAAGCCGA AGAAAACACA TTTACAAGAA GCTGAACAAC
 TGTATCAGA ACATACATCA AGGTGAAGAG TTTCGGCCCT CTTGGTATAG GGTATGTATG GTTACATCTC CAATTTTGAA
 CAATGATGAC ATAAGGNTA ATACTCTATT TATTCAGGAG ACCCCATAAT CAGGATAATA GTAGGCATT CAGAGTAATA
 AGTGATCACA GTTGAATGAA CGTGTTCACC AAAAGTCTTA GACCAACCTG ATATCATCTT AACTT

SEQ ID NO:2088: (Length of Sequence = 326 Nucleotides)

ATTGAATAAC TTAGGCAATC TTCCACTTTG ACTGAAATGA TTAAGATCAG TTTACOGAAA GTCATTTTCAT CCTTGCCCTG
 CAGGCATCTG GCTATTCTTG GTGCAGGGCT GATGGGAGCA GGCATCGCCC AAGTCTCCGT GGATAAGGGG CTAAAGACTA
 TACTTAAAGA TGCCACCCTC ACTGCGCTAG ACCGAGGACA GCAACAAGTG TTCAAAGGGT AAGCCTGCTC TCTCTCTTG
 CAAGAGTTAG AATGTCCTTT GTTCTTGGT TAGTTGTTTT TTGTGGTGGC TTGGTGGGTT TTTTGTGTTG TTGTCTCTG
 CCATCA

SEQ ID NO:2089: (Length of Sequence = 291 Nucleotides)

GGGTTTCCTT TTCCACTCAT CGGAGATTCA GAGGGATGAG CTGGCACCAG CTGGGACAGG GGTGTCCCGT GAGGCTGTAT
 CGGTCCTGCT GATCATGGGA GCGGGCGGAG GCTCCCTCAT CGTCTCTCC ATGCTGCTCC TGCGCAGGAA GAAGCCCTAC

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TACTTTCACCT GTCACCTTCT CTCTACTGGA TAACAGGCCA AAAGTACTGG CACTCATCTT TCACCTTCTT CC

SEQ ID NO:2076: (Length of Sequence = 223 Nucleotides)

GTCACGAGGT CAGGAGATCA AGACCATCCT GGCTAACACA GTGAAACCTC ATCTCTGATC TATTCAGGGC TCINACTTCT
TCCITGGTTA GTCITGGGTG GGTGTATGTG TCCAGAAATG TATTGATTTT TCTAGATTT CTAGTTTATT TNGTAGAGG
TGTTTATTCT CTGATGGTAG TTTGTATTTT TATGGGATCA ACGGTGATAT GCTCTTTATC ATT

SEQ ID NO:2077: (Length of Sequence = 323 Nucleotides)

GTCCCCCTTC CCCCTTGTG AGACCAGGCT CTGTCTCAGG AACAGGCCCTG AGGGAGGAGG AGCCACGTTT CTCCTTCCTT
GGAGCCCTGA GGTGGCCAGG CTGTCCCCAC ATAAAGCATG ACATCCAGGT GCCAGCTGGC TAAGAAATGG AGCCTGAGGC
TGCAGCTCAC CACCTGTACC TCACAGATGT CCATTCAGAG GAAAGAAGGG TGCTCCAAAC GCCAGGCCCC CAAGGAGCAC
AGACTCAGGG TCCAGGCAGG TTCAGTGCTA GTAGGCAGGT GGGCACTGCT GTCCAGGAAA ACCTGGTGGG CAGCTGTTTT
CCC

SEQ ID NO:2078: (Length of Sequence = 310 Nucleotides)

AATTTCAGT TGTAAATCA AACCTACTGA CATTTATAGT CCCTTACTTT CTCTCTTTC TTCCATGTGA AATGTCGAA
ATGTGTACA GTCATACCTC CCACGTATTT TTTAGGTTTT ACTCTCATAC TTCAATAATC ACTACACCCC TTTATTTCAA
TAAAGTTTT AAGTCAGTGC TGATTTTTTG GTAGCTCCCA TTTCTGATA TATTTGTCAT GTACATATGC AAGTGTATGT
AATGTAGGTG TGCATCTATA TATACCCACA TATACATATA TACATATACA TATATATGTC CATATACACG

SEQ ID NO:2079: (Length of Sequence = 281 Nucleotides)

GAGACCTGCC AGAAGATTAA AAAAAAGAAT GAGAGAAAAG CCCAGTTAGT GGTTGTGCAA CTTACTTCCT TTAAATGTCC
CATGGATGTA GGACAGTGCC ATGTTTCAAG ATGCTGTGTA GCTAGGTCTT CAAGATTTAT AGAATGTTAC TTATGAACAA
AATATAATTA TTTATGGTAC AATCTTTGTA CTTTAGCAAA TCTGGAGTGA GTTCATAGTC AAAGTCAGTT AATATTTCTT
AGAGGAAAGT TTTGGCTTTT TGTGGCAACA TTTTATAGC T

SEQ ID NO:2080: (Length of Sequence = 311 Nucleotides)

ATTAAAAAGA ATATTATTTA TTATCTNCTT TATTAATACT CACATGTAAC CTTTGCTTTT TACACAAAAG TCTGCTTTAG
AAGAATGCCT CCNCGGCTTA TCATGCCCAA TGGGGCTTTT TGTTTCTGGA CCACTTCCCC TTTCTCCACC CCCACCCCA
CATCCAAATT ACTCTTAACTA TGTTACAGA TACCACGNAT ATTTTGTAAA CAAGNTTTGG GTTACTGGAA CTGATTTCA
TTAACATCCC ACTTCAAAT GGAAGGCAGG TGGAGGGCAG GGTAAAGNAA TAGGGGGAAA GAGGGCAAGA G

SEQ ID NO:2081: (Length of Sequence = 207 Nucleotides)

GGACGCAQGC TCGTGCCAT CACCGCTGGG TGGTTTTTTC CCCTTAACCT TTTACTTAGC CTMTTGGT TGTNTCCCA
CCCCACCTC CTCACCCCT TTCCAGTTCT TCTTCAGGCC CCTCCAGAC GCACCCAGC GGCCCTGCA GCCCTGCT
CCAGCTCCA GCCTCACCTT TGTGCCAGA CTGCAATTTG GAAGACT

SEQ ID NO:2082: (Length of Sequence = 260 Nucleotides)

TTAAAGAAA GTGCATCTT ATTTGCAAGG AAAACAAATG GAATAGACAA AAATTTTGA ATATAAGAC TTTTINCAT
TTATGTATGT GTTACAATT CAAAATAATA AAGCTAGTTA AAAGTCAATA CATATTAGAT ATATTCAAAT ATTTINCAA
ATAAATTCG ATCTTATCAG TTAACACCCA TAGCAAAAGA CTAAGGAGTA TTTGTATAAC ATTAGGGTAT TTGACCTCAT
ATTCTATTCA TTTGGGTTTA

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CCACCTGGCC CGAGTGGAG CTATGCTGAA TGACCGCGT CGGATGGCTC TNGAGAACTA CCTGGCTGCC TTGCANTATG
ACCCGCCACG GGCTNATCGN ATTCTNCAGG GCTT

SEQ ID NO:2069: (Length of Sequence = 321 Nucleotides)

GTGCCATCTG TTTACTTCTC AAATGAAAA GAATTCAGGT CTGAGTGTCC AGGAAAGGGG GTGAATTTCA TAACCGCCTG
TGACAGOGAT GGGGAGGAGC CACACCCCTC CAGAGGGTAC CACCCAGCGG ACAAGTGGGG AGGAGGAAGT AGCTGGCATG
AAGCGGCCCC ACCCAACCTC CGGGAGAGAG GAAAAGGAGA ACACGGGATG AGGAGGCTTT AAATAGTATT TCATAAAATA
AAAATGCCCA GCACTCTTAG GAACCTCTCA TTCACCGCC TAGTTTTTGT TTAATAAATT CTAATGCCAG AGCTGGGGGG
C

SEQ ID NO:2070: (Length of Sequence = 161 Nucleotides)

AAAGCTGCAT AAAACAAGTT TAATTCCAA CCAGGGTCAC AGTCATCGG TTATCCACA TTTTGAGCAA GGATAGAGAA
GGTGAGTTAT TAAACATATA CAGTCTACAT TCCAGAGGAG GAACTGCAGT TACCACTATA ACACCACAGA CAACTTTGG
G

SEQ ID NO:2071: (Length of Sequence = 288 Nucleotides)

GTGGAAGGGC CTTTCATCAT GCTTCCCATC TTCAGGAACA TCAGAGAATT CATACTGGGG AGAAACCATT CAAATGTGAT
ACATGTGGTA AGAACTTCCG TCGTAGATCA GCACCTAATA ATCATTGCAT GGTCCACACA GGAGAGAAAC CATACAAATG
TGAGGNCITG GTTAAAGTGT TCACTGTAG CTCAAACCTT CGTATCCATC AAAGGGTCCA CACAGGAGAG AAACCTTACA
AGTGTGAAGA ATGTGGTAAAG TGCTTTATTC AGCCTTCACA ATTTCAGG

SEQ ID NO:2072: (Length of Sequence = 284 Nucleotides)

TCCTGTCTTC AGACCCCTTT GCGTATTGT CCTCCTAAC TGGGACCTAA GCTAAGACTC AAGGGCTGCT CCCATGCCCT
TCAGTATCCC CCATAAAATC TAACTACACA TTAGAACTC AAAGAATAGC ATAGGCATGA TCCATCACCT GCAACAGAAG
CAGTGAGGAG ACTTAAGCCA GGGTCCCTNC AAGGATTNC ACCGACCNIT CCTGCATCTC TGNATGCCGG ACTCCTAAGC
ATTTACTCAG ATTTTAAACA GCACATAATG CCATGGCGAG GATG

SEQ ID NO:2073: (Length of Sequence = 270 Nucleotides)

GGAGCGATAC GCCCTGTG CGAAGGACCT GCGTCTAGA GATGTTGTGT CTGGTCCAT GACTCTGGAG ATCGAGAGAG
GAAGAGGCTG TGGCCCTGAG AAAGATCAG TCTACCTGCA GCTGCACCAC CTACCTCCAG AGCAGCTGGC CACGCGCCTG
CCTGGCATTN NANAGACAGC CATGATCTTC GCTGGCGTGG ACGTCAAGAA GGAGCCGATC CTTGTCTCTC CCACCGTGCA
TTATAACATG GGCGGCATTG CCACCAACTA

SEQ ID NO:2074: (Length of Sequence = 278 Nucleotides)

GCACATGCCA TCAGTCTCTG CTAATTTTGT TATTTTGTAGT AGAGACGGGG TTTCGCCATG TTGGCCAGGC TGGTCTCGAT
CTCTGACCT CAGCTGATCT GCCCACCCTG GCCTCCCAA GTGCTGGGAT TATAGACAGG AGCCACCGNC CCGGACCCCTC
TCTCACTTCT CAAATCTCTT TCCTTTTCTC ACCTTCTAGG TGTCAAAGAC AGTGGATGGT CTCTGAGGTT CAAACCAAG
CTGACCGGGT AAGTATTTAC AGCAAGCAT CCAATGGG

SEQ ID NO:2075: (Length of Sequence = 232 Nucleotides)

GTCTCTAGGA TCACTCAA CCCAGGATCA CGGTTTGTGA ATGTATCAA GGCATGATT TGGATTTTCA AGCTGGCCCA
GTGAACAACA AGCAATCAAG CATTCCTTTC TCTTCTTTC TCTCTCTCAC ATATACACAC AACTCTTTC TCTCTCAGT

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CTAAATCAA CCACATAATT GGACATAAAA GAATCTTCAG CAAATACAAA AGAACCAAAA TCATAACAAA CACACTCTAG
GGCCACTGCA CAATAAAAAT ACAAGTCAAG ACTAAGAAGA TCACTCAAAA CAATGCAATT ACATGGAAAT TAAGCAACAT
ACTCTCAAAA TGACTTTTGG GTAAATAATA AAATTAAGGC AGAAATAAAG AAGCTCTTTG AAATAATGA GAAGAAAGAT
ACAACGTATC AGAAACTCTG GGTACAGCT AAGGCAGTGA TAAGAGGAAA ATTCTTAGCA CTAATGCTC ACATTG

SEQ ID NO:2063: (Length of Sequence = 312 Nucleotides)

ATCCATGGCT TTAGCAAGAT CCCAGTGTG GAACTCTCCT AGCAACTTGT NITCATCCAG TGATACTGGT TCTNTGGGGG
GCACTTACAG GCAGAAGTCC ATGCCCGAAG TGTTGGAGTG AGCGTAGAT CCCCAGCCTC CACTGACAGG CAGAACACCC
AGTCAGATAT TGGTGGCAGC GGAAATCCA CGCCTAGCTG GCAAAGAAGT GAGGATAGCA TTGCTGACCA GATGGCTTAC
AGTTATAGAG GACCTCAGGA TTTCAATTCT TTTGTCTCG AGCAGCATGA ATATACAGAG CCAACATGCC AT

SEQ ID NO:2064: (Length of Sequence = 294 Nucleotides)

TACCTAAAGA ATCTCAGAT GGGAGACCCA GCCAGTTTGG NTCACAAAT AGCAGAAGTC AGCCAAAATA TAGAGAAAT
GCGAGTAGAG ACCCAGAAAT TTGAGGCCTG GCTGGCTGAG GTTGAAGGCC GGCTCCCAGC ACGCAGCAG CAGGCGCGCC
GGCAGAGCGG ACTGTACGAC AGCCAGAACC CACCACAGT CAACAACCTNC GNCCAGGACC GTGAGAGCCC AGATGGCAGT
TACACAGAGG AGCAGAGTCA GGAGAGTNAG ATGAAGGTG TGGCCACGGA TTTT

SEQ ID NO:2065: (Length of Sequence = 331 Nucleotides)

GAGCTGAGTT TCACCGTGTT GCCCAGGCTG GTCTCGAACT CCCGGTCTCA AGTGATCCTC CTACCTCAGC CTCCCAAAGC
ACTGGGATTA CAGGTGTAAA TCACTGTGCC CAACCTGCTC AAACCTTTGG AGAGAAGCAA GTCTTCTAGC TGAACGTGAT
AATGGCCTCA AAAGCAGTGT TGACAGCAGA TAATCTTCAC ACAGACAAAT GTCTACAGTT TCTAAATAAG CCAACTGTGC
ATATGGCCTA CAGGCTCTTC AGCATAACCT ACCCAAAGCT CAGGTTCCCT GAAGGCCAGG ACAGTACCTC GGGCCTTCAA
GCAGCATTG G

SEQ ID NO:2066: (Length of Sequence = 321 Nucleotides)

GTCTTGANCT CTTGACCTCA GGTGATCCAC CACCTCGGC CTCCCAAAGT GCTGGGATTA CAGGGGTGAG CAACCGCACC
TGGCCTTGAA CCCTTTGAAG TATTGATGCA AAAACAAGTG GTCAGCTATG GCCAAATTG CAATTCAAAA AGATCCAAGA
AAGCAAGTTG AACATCCTGA TTGGAGATGG GACACACCCA AACGTGTGTC TTGAGGTGGC TGCAAAGTCC TCCGGTCTGA
GCCAGTNTAA GCAGGTTTTA CCCCAGCCCA TGATTAGAG AGATGTTNAG TGCAGATCCT GAGCTCAGCA GAGAGCAACA
T

SEQ ID NO:2067: (Length of Sequence = 335 Nucleotides)

CTGGCTCTGT GGCTCAGGCT GGAATGCAGT GGGCGAGGT TGGCTCACTG CAACCTCCAC CTCTGATCT CAAGNCGTCC
TCCCACCTCA GCCTCTCAAG TAGCTGGAAC TACAGTGGA CTACAGGTGG ACAACATCAC ACCCAGCTAA TTTTNTNAT
TTTTTGTAGA GACGGGGTTT CACCTGTGTT CCCAGGCTGG TCTCAAACCT CTGAGCTCAA GCAATCTGCC CACCTAAGCC
TCTCAAAGTG CTGGCATTAC AGGCATGAGC CACCGTGCCT GGCCTGGGAA GCTCTTTTAA CAGAGGTGAT GTAAAGTAGA
AAAAGCAGTG GGCTC

SEQ ID NO:2068: (Length of Sequence = 274 Nucleotides)

GCAACCGAAT GGACAGGGTA AAGAAGGAAT GGAAGAGGC AGAGCTTCAA GCTAAGAACC TCCCAAAGC AGAGAGGCAG
ACTCTGATTC AGCACTTCCA AGCCATGGTT AAAGCTTTAG AGAAGGAAGC AGCCAGTGAG AAGCAGCAGC TNGTGGAGAC

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CTGCTCAGC CTCCCAAGTA GCTGGCATT AAGGCGCCCA CCACCACACC TGGCTAATTT TTGTATTTTT AGTAGAGAGC
 AGGTTTCACT ATGTTGGCCA GGCTGGTCTT GAATTTCTGA CCTTGTGATC CGCTTGCTC GGCCTCCCAA AGTGTGGGG
 ATTACAGGCG TGAGCACCAC GCCCGGCCAA CTTGCTTTTC TCTAATGGCT GCGGATGTTA ATTTTTTCAC TGGCTTATTT
 ACCGTCCTCT TCTGTGGA

SEQ ID NO:2056: (Length of Sequence = 292 Nucleotides)

CTCTTGACTC CGAAGGCTGG TGACAGACAC ATAAGGCAGC TCAAACTCTT GCAACTTCCG TACAAAAGAA AAGGCTCCAT
 CCTCTTTTTT TCGAACTAAG AATAGACTAA AGTATCCAAT CAAGTCATCT GGAAGATCCA GCTTTGCAGC TACAGCCTCC
 AGGACATCCT CAGTCTGATC TGAAGTTAGC ACGTTGACCA GAACCTTCTG CCCGTTGCTG AGCAGCACTT CCAAGGACAC
 TTCTCTGTG GGGACCTGCT GTGTCTCCTG TTGTGCCCCA CGCAGGAAAC TG

SEQ ID NO:2057: (Length of Sequence = 293 Nucleotides)

CCAAAAAAGT TGGGTGCTG AAGGTGGGGT TTGTATCATG GCCAGGCTTC AAATTTAGGT CAGGCTCTGG TGGTACATCC
 TTATATGCTT GGTGCTCAGC ACAGGTCAAG ACACACAATA GACCTCAAT AAATATTGTC TGAATTTGAA CAATTCCTGT
 AAAAATCTCA TTAAGAGACA TCAGCTTGGG ACACAGTTCC TCTCTTACTG TTCTTCTCC CAGAAGCTCC TGAATGAGC
 AGGTCTGGCG GCAGGGGGCA CACAGGGCTG CTGCTCAAAT CGGAGAATGG CAC

SEQ ID NO:2058: (Length of Sequence = 172 Nucleotides)

CTTCTACAGT CAAGGAGCTC AAGCTGCGG GCGGACCTG CTCTGCTC CCACATTAAT GCGGCAATCC TOGGAGGATG
 ATATAGACCG GCGGCCATC CGGAGAGTGC GCTCCAAGAG CGACANGCG TACCTGCAG AGGCCAGGT CTCTTTAAC
 CTGGGGGCG CT

SEQ ID NO:2059: (Length of Sequence = 245 Nucleotides)

GCAAGANGGC CGAGGGGGCC CAGAACCAGG GCAAGAAGGC CGAGGGTGCT CAGAACCAGG GCAAAAAGT AGAAGGGGCC
 CAGAACCAGG GCAAGANGGC TNAGGGGGCC CAGAACCAGG GCAAGANGGC CGAGGGGTCT CAGAACCAGG GCAAAAAGGC
 CGNGGGAGCC CAGAACCAGG GCCAAAAGG AGAGGGAGCC CAGANTCAGG GTAAAANGAC AGAAGGGGCT CAGGGCAAAA
 AGGCA

SEQ ID NO:2060: (Length of Sequence = 318 Nucleotides)

ATGCCCTGTT AAGGAGCTTG GCCTTGATCC TCTAGGCAGG GAGCCGTGG AGGATTTAAG CCAGGGAGTG CTGCGGTGG
 TCACACTGCG CATTTATGTA GATCGTTTGG GCAGCCAGGG GAAGGATGGA TTINAGGGGG ATGAGATTAG AAAGCTGGGA
 TATGAGTTAG GAGGCTGAAA GATGGTTGAT AAAAATNATC GTTGGGCAGC CGAGATAACT GACTTCAAGG ACATATACTG
 GACTTATAGC AGAGCCTGTT GAGTCTGCT TTGACACACA GTTCAAATAA TCACTTAGTC ATGTTGTTTA TCTTGCCA

SEQ ID NO:2061: (Length of Sequence = 331 Nucleotides)

AAAAATAAAA ATCTATAAAC TACGGATCAT AAGCAACTCC TGTTCTGTG GGTTTCACCA CATTTCTCCAG AAAGTGAAGT
 TTGCTCATA AAAATTACAT AGAATGTAAA CTAATTCATT TTTTAAAGTA AATGCAAAAC TAAGGGTTAC ACAAGCACTG
 AGCATCAACA CTGACAGAAT ATTAATCTG AAGCCCATTA ACTTTGACAA ACGTTTATTC ATCTTTGCCT TCTTGAAGCG
 TGTGACTATC CCAGTTTAC AGGAAAAGCT TAAACAGAAA AAGTTAATA ATAATCTCAA GGTTAGNAAA CTAAGACATA
 ATTTCTAGCT C

SEQ ID NO:2062: (Length of Sequence = 316 Nucleotides)

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ACTTTGTGTG TCTGATTTTA GGACTCTGGC TGGCCATGTG CTNNNGGTG CCTCTCCTGC ATTTNCCACT GGATTTNCAC
TGCATCGTTT GGAGATACAA AGCGAGCAGT TCTTGGTCAG AACCTCCTC TGCTTTTCAT TGTGTTTGAT AATGGTTACT
GGTCTCTTCT CTCAAGGGTA GCAAGGCCAA GCTGATGGCT GCTGTTTTAG GAGGCCATCA GTTCTTCTCT GTGGAGAAGG
G

SEQ ID NO:2049: (Length of Sequence = 269 Nucleotides)

ATTTTTAGTA GAGACAGGGT TTCACCATGT TGGCCAGGCT GGTCTCAAAC TCCTGGCCTC AAGTGAGCCA CCTGCTTTGG
CCTCCCAAAG TGTGAGATT ACAGGTGAGA TATTCTATAT TCATGGATTG AAAGACTCAA TATTGTTAAG ATGTCAGTNC
TTCTAAAGN GATTTTTTAG ATGCAACACA ATTCCAATCA AAATCCCAGG NTTTTTTTGT AGCTATCAAT TGATAGATAT
CAACAGCCAG CTGATTCTCA AATTACGT

SEQ ID NO:2050: (Length of Sequence = 170 Nucleotides)

TTTTGAAGAG AACGTCAGTT TAATAAGCT AAATGGGGAG AATTGAAGTT TGCATTTGAC ATGGTATTAA ACAAACCAA
AGGGCTGAAA CTCATGTTTA GACAACACAG GTCAGTAGTC ACTAGGCAAA GAAAACAGTC CACAGCAGGT GGCACAAATA
ATTCCTATAC

SEQ ID NO:2051: (Length of Sequence = 262 Nucleotides)

CAGGGCACAC GCAGGACCAC TGTGGATTAG AAACCCACAC GTGTCACCTG CAACATTCCT CCCACATCCA CATCCAGAC
GGAGCCAAAT CTCATTTGTC ACCCTCAGTC ACCACCCAC AAGATGGAGC CGCTGGTTAC GACATGGATG ACAGGTGTCA
TGCACAGGGA GAGAATTTNT CCCCGGATAC CCTGAGGAC CAAGGACCAC CCCAGGCTA GGTGGGAGG ATTGAGAGCA
GTGCAAGAAA CCAAGGAGGA TN

SEQ ID NO:2052: (Length of Sequence = 325 Nucleotides)

GAAAAAGAT TGTTTTGTTA GAAAAAGCAA AAACAAAAA GCATTAGAAA GTGGGAGCCA CTGCACAGCA GTAGCCTAGA
GACTGGCTGC GATATGGTAG CTCTGCCTTG ATATCATCTT CGTGTCTTCA GGCATAGAGA AATGGCAGAG GAGCAGTAAG
ACCCACAGG AGATGGCCAG AGGNTCCACC ATCAGCCTTC TGGGACTGA GGAGGTGATC TTAGTGAAT TATTTATAC
TCACCTCCCC CGGGGTTTAG TCCTTCTCC AAACACTTAG TTCCAGGGCG CAGGAGACCT GTTACTAGCA CTGTATGTTT
CTTG

SEQ ID NO:2053: (Length of Sequence = 222 Nucleotides)

TTTCAAAAT AGTCTTAAGA GTATAAGCTG TTTTNAGGG CTGTAGCCAG ACTACATAAT GAGCGTGAA AGCGGCTGCC
TTCCCCTCTC CTGACACCAG CAAGGGGGAG GCACCATCAC CGGCCCTGCC CCATCATGCA TCCAATGATT ACTAGCACTA
GANGCCAACG GCAAAGGNCC CCGCGGCTT GCTCGTGTAT AATCCAGGT AAGCTATACA CG

SEQ ID NO:2054: (Length of Sequence = 341 Nucleotides)

GTAAATTAAG AATATGGCCC CAGAGTTTG TTTATCTGGG GTCGAGCAT AGATTTTATA TTCTCTGTG CGTTTTTTAA
ATCTAATTT CTGTCTCCAA TGGAGAGAGA ACAGGGAGGA TACAGAAGTA TTGCAGCCCA GATCCCTAT CAGGGGGACA
GCTGGTGGC AAAGCAGCCA CCCACAGCC TTGTGGCTAG AGTACAGTGG GGTGGACCCT CCAGCCCCAA TAGCCCTAGT
ACCCAGCTGG CAGGGTGGC CACCCCTGCT GTCCACCTGC TCCATCCTCT AGGGGTTCCT CAGGCCCTG ACCGCACAGG
GAGGCTGGGG CCAGCCTGGT C

SEQ ID NO:2055: (Length of Sequence = 258 Nucleotides)

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GTTATTGTTG TTGAGATGG AGTTTCACCT TTNTTGCCCA GGCTGGAGTG CAGTAGCATG ATCTCAGCTC ACTGCAACCT
 CTGCTCTCCG GGCCCAAGCG ATTCTCTCC CTCAGCTCC TGAATAGCTG GGACTACAGG TGCCCAACAG CACACCCGGC
 CAATTGTTGT ATTTCTAGTA GAGATGGGGC TTCTTCACGT TGGCCAGGCT GGCTCGAAC TCCTGACCCC AGGOGAATCC
 CCCACCTCAG CCTCCAAAAG CGCTAGGACC ACAGGCGTGA ACCACTGCGC CCAGTCGGAA GTAATAGTTA TTAACCAATG
 TGATGGCCCG GTGTAGGGAC CCTCGCTGT AATCCAGCA CTTTGGGAGG CCAAGGAGG AGGACCGCCC GNGACCAAGA
 GTT

SEQ ID NO:2043: (Length of Sequence = 331 Nucleotides)

CCCCCTACGG TGTGGCTCTC AGCAGCCTCA CCACAGGCAC CGCAGCTTTC CGCTGTGCA CCCAGCTGGG TGTGTGAATC
 CCCCTGGACT GCGCCAGGC CACCTTCATC TCCCATGACA AGATGGTCAT CTCCCTCAAG GGCAGTCAGA TCTACATGCT
 GACCTTCATC ACGATGGCA TGGTAGGTT CCGAGTGTTC CACTTTTGAC AAGGCGGCCA CCAGCGTCTT CACCACCAGC
 ATGGTCACCA TGGAGCCTGG GTACCTGTTC CTGAGTCTT GCCTGGGCAA NTCTCTCTC CTCAAGTACA CCGAGAAGCT
 TCAGGAGCCC C

SEQ ID NO:2044: (Length of Sequence = 244 Nucleotides)

ATGGAAGATA CTAAGAGCCT CAGTCTGGAA GCATTTCCT AGGAAGCGCA TATAGACAGA GAAGATCAAG GACTGAGGCC
 TGAGACAGTC AGCACTTAAA GGGTGGGGG AGAAGTGCCA AGGAGACAAG GTGAGAACAG CAGAAGAGTA GCCAAGGCC
 AGGATGTTGC CACAGAAGCC AGGAGAGGTG AGCATGAAA CAGAGGAGGA CCAGCTGCTG GGACAGAAGA GCCATATGGA
 AGAG

SEQ ID NO:2045: (Length of Sequence = 333 Nucleotides)

GTCAGGGATT TGTCCATTCT GCTCTGGCC TCTCCTGAGG CTTCTAATG GGAGACCAA TCAAAATGT CCCATGTCAC
 TTGAGTGGGT AACTGCTTA CAGAACCCTG AGGTGACTC CTGCTTCAGT TCTCAGCTGT TTACCACAGC CCTCCAGGGT
 CCAAGATTG AGGAGCTTTC TCTTCTCTGG GAGGAAGTGT CTCANATTA GCTGTGTGT GTTTTGGACA GAGGCTCCAC
 AGCGGTGGCT CTGAGGAAT CCTCACCAGT TTGTCCTCTT CCTCTGACA AGCAGCACCT GAGCAGATGC TGAGGCAGTT
 CATTAAACCA GGG

SEQ ID NO:2046: (Length of Sequence = 274 Nucleotides)

GCAGGTTTAT GTTTTATTT ATGTATTNA ACTGACTTAT TTGIGTATCC CACTAGAACA ATACATTAC AATATACTTG
 CAGAACTGTG CTTGGGTCAT CATGGGAGCA GAGAACTGT CCAGTGAATA GTTGTGAAG AAAGGAGTAA AATCTCCCCC
 AAACCTTAAA GGCATCCTTT TCGTAGTGTG TGTCCCATAG GTATGGCTGC TGAGCACCAG GGCTGCTCAC CATGCTCCCA
 AGAAGCAGAG TCAGGGAGGC AGACAGCAGG GTTT

SEQ ID NO:2047: (Length of Sequence = 327 Nucleotides)

GGCCGCGATG TGCTTTTNTC CTGINTTGC TGCCCGGGAT GCGGAATCTT GAGCCTGGT GTCGGGTAC AGAGTTGTCC
 TGGTGACGGG ATGCGGAGGT TTCCTCCTT TTGTTGTGGG GGCGGCTGGT GGCAGGGGCA GCTGGTGGCA GGGTTGCCCA
 CGCTAATCTC CGAGTCTCTA AGGGCACCGT CTTTCTTGA TCCCTCTTGC GCCTGTGCA TAAAGGCAGA CCCGCGGGCG
 CGCGCCGGCA ACCTGAAATC AGAGCAGGCG TCGTGGGCG TCAGGAACCT TGCTGAGCTT CGCGATCTT TCATTGTTGC
 TTCATTT

SEQ ID NO:2048: (Length of Sequence = 241 Nucleotides)

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SEQ ID NO:2035: (Length of Sequence = 290 Nucleotides)

CTTTTCCTTC ATCTGAACAC AGAAGGAGCC ACGGTCTGGA AAGTNTGCCT GTCCTTCCCG GGAGTGGGGA GGCCGGTGTG
AGTTTTGATC TTCCAGCTCA GGCAGACACC TTACACAGTG CAAACAAGAG CCGTGTCAAG ATGAGAGGGA AGCGTAGACC
GCAGACCCGT GCAGCTAGGC GGCTGGCTGC TCAGGAGTCC AGCGAGGCTG AGGACATGAG CGTCCCCAGA GGACCCATTT
GCACANTGGG CTGATGGCGC CATTTCCTCCA AATNGCCATC GGCACCAGCT

SEQ ID NO:2036: (Length of Sequence = 241 Nucleotides)

TTATTTTATA TAAAAAGTGT TTCTGTGATT CTCCAGAGCC CAGGAGTCAG TNCTGGTGGT TGGAGGGACC TGCCCCACT
GGTTCATTTA ACCCTCTGTC TCGGTGCCCT NAGAACCTCA GCCAGAAAGG CAAGGAGGAA ATCAGAGCAN GAGCCTCATA
CTCTGGTGA TCTATTCAIT CINTGACCTC AGGGGTCACA TATAAGGTCA GTGTTTCTCG TCCCCGNCAG ATCTGCACTG
C

SEQ ID NO:2037: (Length of Sequence = 270 Nucleotides)

CTATTATTTT GCATTTTGG TAGAAGGGT GGTCTACCA TGTCGCCAG GCCGGTCTCG AACTCCTGAG CTCAAGCGGT
CCACCTGCCT CAGCCTCCCA AAGTGTGCG ATTACAGGCT TGAGCCACTG CACCCTGCCC AACCTTGACT ACTTCTAATA
GGGATGAGTC GAGTAGCAGT TNGGGGCGTC CTGTGCGGCT GGGTCTGCCT GAGGCTCCCC TCGGCCCGT CCATGGCTTG
TRGTGCATCT GGCCCTGAGT GCCTTGSCCC

SEQ ID NO:2038: (Length of Sequence = 151 Nucleotides)

ATTTTAAATT GAGCATTAAAG GGAATGCAGC ATTTAAATCA GAACTCTGCC AATGCTTTTN TCTAGAGGCG TGTTGCCATT
TTTTTNTAT ATGAAATTC TGTCCCAAGA AAGGCAGGAT TACATCTTTT TTTTTTTTTT TAGCAGTTTG G

SEQ ID NO:2039: (Length of Sequence = 166 Nucleotides)

TTGTCTGTT ACAACCTCCG TATGACGCCA CGCCACCCGC TGTTACGTC CCGTCGGCCT CCTGCACAGN CCACACGCTG
CGCCCGGAAG GCCCTGCTG TGGAGAAGCC GGACCCATCC CCGAGGTCCC CAGCGAGGAC ACANACTCCA CGAGAGCAGC
CCCTCC

SEQ ID NO:2040: (Length of Sequence = 362 Nucleotides)

GAAGTACGGT TAAATTAGA TTTGACCATA TGGAAGATCT TTTACCAGTT GGTCTCCAAG AATGTCTTCC TTATTATGTT
ATTGGTCATT TTGAGCGTG TGTGTGGTG GGGTGGTTC TGCCTTATAT TCCTTAACTA CATGTATAT TTTTGTAAAG
AATTGGGAAT TCATTTTAAT GCTTTTAAAC ATCTTCACTG GAACTGGAA TAAAGTTATT CTGACTCTG TACCTTGAGC
CATGTCAA GTCAGGGGT ACATTTTAGG TATCTAAAAA TTACTCTTTA ACTTTCACAT TCCCTGGGT AGGAAGCTGC
TGTTCAAGAG AAATTTTCCN GGTCTCTG GCAATTGGCT TA

SEQ ID NO:2041: (Length of Sequence = 360 Nucleotides)

CCTAATTGTA AGTNATGAAG TCGAGGAGGT GCGTGATAAT GGGCCAAGTG AGGATGCAAT GCACCAGGTG TATAAGTAGC
TGCACTCACT CCAGCTTCAA TTCCAGTTC CCAGGCAGAC CTCTCTGGAG CCTGTGAGG ATGTNAGGAC ATAGTCTGAG
GCACATGAAT ATGATGCCCA TGACCATAGT TTGGGTGCAT CCTATGTGGA TGGGGTGGG GCGTTCATG TGCCCGCNTT
GGATGCTGCA TCATCCTCCT CCTTTGAACT TCCATCCTCT GCATCACTTC ATGAGGATGC AGTCTCTGTN CTGGAGGTGC
TGTGGCTGGA ATATGGTGG AAATTGGCTG GTGTGTAGGA

SEQ ID NO:2042: (Length of Sequence = 403 Nucleotides)

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AAATTTNTTA CAGGAATAAA TGAGATAGGA TTTTCAAGGG TATTINCTAT TAGGATTTAA TAAACAAAG TGATCTTTAG
AGAAACAAAT CTCCCATCA ACATGCTATA CT

SEQ ID NO:2029: (Length of Sequence = 261 Nucleotides)

ATTCTACTA AAANTACAA AAATTAGCCA GCGTGGTGG TTGTGCACCT ATAATCCCA CTACTCGGA GGCTGAAGCA
GGACAATTGC TTGAACCCAG GAGGTGGAGG CTGCAGTGG CTGAGATGC ACCATTGCAC TCCACCTTGG GCAACAAGAG
GGAAACTCCG TCTCAAAAA ACAAAACAA ACAAAACAA AACAAAGTC AAGTGCTTAC ATTTTGCCAG AAGCCACAA
TGAAGACTGT GCCTTATAGG C

SEQ ID NO:2030: (Length of Sequence = 384 Nucleotides)

NNCCNNGGAC CAACAGCAGC CAGAGCAGTT AGCCAGTTAG TCCCCAGGCC TGTGGCAGAG GCGTTTCTGA CCTGCTGGGC
CGAGAATGGG TAAGTTGTCT GGAGTCAGGT GGGCCACGT AGGACAGGT CACAAAGCCT GGGTTTGTCT CTGGGTACTT
TGCGCCTCTG GGTGCTAGA GGTGGGGCAT GGTGGCTGGA AGTAAACTG CCAACTCTGG CCTCAGAAC TCTCAGGTAT
AGAAGCCCA GATGTCTAAT ACCCTNTCC AGTGCCCGAG AGCTGCCCTGG TGTGAGGTAG AGAGGACACT GTACCTGGGT
GAATGATCAG ACCCTGGTAG CTAAGAAGN ACTTGTCCT TTAGTCAGTT TGCAGANCC CTTT

SEQ ID NO:2031: (Length of Sequence = 261 Nucleotides)

ATCACAGAGG AGAAGCCACT GTTGCCAGGA CAGACGCTG AGGCGGCCAA GGAGGCTGAG TTAGCTGCCC GANTCCTCCT
GGACCAGGA CAGACTCACT CTGTGGAGAC ACCATACGCG TCINTCACTT TCACGTCTA TGGCACCCCC AAACCCAAAC
GCCAGCGAT CCTTACCTAC CAGGATGTTG GACTCACTA TAAATCTGC TTCCAGCCAC TGTTTCAGTT CGAGGACATG
CAGGAAATCA TTCAGAACTT T

SEQ ID NO:2032: (Length of Sequence = 344 Nucleotides)

CCCCTGCAG GCGTCTGGTT CTTGGGGAA AACGCTCACC CACCCCTGGT AAAGGGCCTG CAGATCGAGC ATCCCGGGCC
CCACCTCGAC CAGCAGCAC CACAAGCCAG GTCACCCAG CAGAGGAAA GGATGGACAC AGCCCCATGT CCAAGGCCT
AGTCAATGGA CTCAAGGCAG GACCAATGGC CTTGAGTCC AAGGGCAGCT CTGGTGCCCC TGATATATGT GNTCTCGCCT
ACATCCCGAA TCATTGCAGT GGCAAGACTG CTGACCTTGA CTTCTCCGT CGAGTGGTG CATCCTACTA TGTGGTCAGT
GGGAATGACC CTGCCAATGG CGAG

SEQ ID NO:2033: (Length of Sequence = 373 Nucleotides)

GGAAGAAAGA AAGAAAGAA GAAAGAAAGA AAGAAATGG CCCCATAGTG CTTAAGTCCT CAGACATGTG TCCTGGTGCT
GGGGACAGGG CTTCTGACAT TCTCTCAGGT CAGTATTGTC AGGTCAATCA CCTTCGACTT CAACACATGT GACCAGAAAC
CTTCCAAGG CAGCCATCCA CTTTGTGTG CCTCCGACG CCATGGCTGA CCACTGCTGC TGCTGTGTAT CCTCGGTGAC
ATCTGGCCTT GGCAGCCTAT GGATTINTGC CATTCTCCTG GCATGAAATC ACTCCTTCTT GTTGTTTTAA TTTGCATTTT
TTCAGTTACC AGCGCAGTTG AGCATCTTT CATACTTA CTGACCATTT CTA

SEQ ID NO:2034: (Length of Sequence = 289 Nucleotides)

CCACCAAAGA ACATCAGCT GTCTTATGTC AAATGCTCGA CAATACCTCT CAGTAGGACG TTGTTGCAAG GCTAGCTAAT
TTTAAATCTG GTATGAGTAA TACAGTCAA CCTAGTTAGT ATGCGAGAAA GTCGTTGCTA ACGCATGGTG AGAGGATGTG
ACGTACAGC ATGAGCAGTC CCTGGTTGTC CCATTGTGAG ATAAACGTAG TNNAGTAGNT CCAAGTTTCT ATTCCAGGTC
TCTGAACCCC AAAGCCAGGC CTTTCACTTT TGCTGGGTGG CCTGGAAGC

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CCACGCGGCT NGTAGTGCAG CCTTCTGIGA CCCCGCTNIG GTAAGTCCAG CCTTTCAGG GCTGCTGAGG GCTGCCTCTT
GACAGTGCAG TCTTATCGAG ACCCAACGGC TCAATCTGCT CATCCNTAAA GTGGGGGATA

SEQ ID NO:2022: (Length of Sequence = 223 Nucleotides)

GGTCACACAG CTAGTTGGTA GAGGAGCTCT TCCATAAGAT AGCAAGGCCA CATCACCTGC AGGGCAGTGC CTGCNCTGGG
AGGTGGCACA ATGTGCCAAG TGATGACGAT GACAATAACT ATGAAAGGAT TTTATATTTG CACAGCATTT GGTTCCTGA
TCTTCGATGA GGAAGAGCTC CTGCCGATGT CTGCTGAATT GTGCAGTAAA ATATTTCAGGA TGG

SEQ ID NO:2023: (Length of Sequence = 294 Nucleotides)

TATTCCTAAG TTGCACTTT ACAAACCAC AAGGGAGAAG TCCTGAAGG GGAGACAGGG GTAGGGGATT AGGGAGTGGG
GGATGGTAAA GAGGGGAAGA GGAAGACCA GAAACGAAGT CCCCTCCAAC CCCATCTCGG GGACCAAGCA GAGACTAGGC
CTCAGGCTAG CCCAGCAGGG TTCCTGTGTC CTGGTTGTAC AGAGCTAGGC CAAAAGACCT CAGGGGAAGG GCCATGGCCC
TCTAGAGACT GCGCCATTT GAGGGACAGC CACAGGCCAA TGTTTCCTGT GCCC

SEQ ID NO:2024: (Length of Sequence = 234 Nucleotides)

ATTTTGTGCG GGTGCAAAC GTCTTCCTGC CTTGAGCTGG GAGCTTCACC AGGCTTCGGT GTAGCGGACG TCCACTTCCT
TCAAATTGGG AAGCTTGGCC TTCAGATCTT CGTAGGTGTC AGCTGAGAGC TINGTGCTGT TCATGTTTAA ACTGCAGAGA
CTCTTCATGG AGCTCAGGGC CAGCAGGCCA GCGTCTGTAA CCGGGGTCTC GCACAGGTTT AGCACCTGGA GCAT

SEQ ID NO:2025: (Length of Sequence = 327 Nucleotides)

AGGAACAAAT GTTAAAGGGT AAGATAATTT CCCTGCAAAA GGACACAGAA GGCACTCTTA AGAAGATGAA TGGATGAGAG
AAGGGAGAGA ATAAAATGCA ATAACGAGCC AGCAATTTACT ATGTATTNNN TCCTCACCTG TCTCTCCATA TTTAGGTCAC
TTACCAGTTT CTGTGCCCTT TTGGAGCTTT TMTTGAGGGC TTCACTCTCA CCCTGTATTT CTTTAGCCCT AAATTGACAC
TCTCTCCAAA AATCCATTCC ATTGTCTGTG GACCNAGATG TTCTATGTAA TTCAGAAGCA GAACTCTTGG CTAAAGGGCT
AGTGTTGG

SEQ ID NO:2026: (Length of Sequence = 328 Nucleotides)

TCAGTATAAA TTTAAAAGAA ACAGCTTAAT GAAATACAAG TCAGTTTATT TGATATTTCAG CCTACAGCTT TCCAAAGCAG
CAGTTGAACA TGTGTTGAG TTTATACCAT TCATTCAATC ATTTATTTTT NCTTCTTTC TTTAGAAAA TACTGGGTGT
TTGATATTTG TTTCAGTGTG CTAGTTTCTG GGAATGTGTA AGGAAGAGGC TGGCTGTGTG GATGAGAGCA ACTTGCTTTT
TACAATAATT ATTTGTTATT GTAAATTAAAC AATTGTCTCT TCTGGTATTA TATGGAAGTA TTTGATCCNG TTGATGGCAC
TGCTTTTG

SEQ ID NO:2027: (Length of Sequence = 307 Nucleotides)

AAGAAAGATG CCAGCTCTTT ATTACCAGGG AAGCTGTGTG CACGCGGTG GAGGGTNCN TTGGAGCTGA CCGGGCCCTT
ACCTTCTCCT GCTGTGAGA GGTGAGTCTT GGTACCCAGC ACGGTGGCCT CCGGGAGGCT TTGATAGGTC AGCCTTTGCT
GCCTCCCAGC TCAGGGCTCC TCCAAGGAAC CTGCGGGGCC CCATGTGCCC ACAGCCCGAG GAGGGAAGCA CCGACCGNCC
TCCTCGTGGC CAGTTGACAC ATCATCCATT TATTATCCTT CAGAGTCTAA AACTTCTCTC GTGATAC

SEQ ID NO:2028: (Length of Sequence = 272 Nucleotides)

ATCCATTCTT GCATTAACT AGAGTTAAAA AGGAATATTG TTTATTGTTT GGCTCTCCCC ACTAGAAGTT TCACAGNGC
ACAGATCATA TCTACCATTT GAACAGCTCT CTGCTGATG GCTAATACAT TTNTTGGCAT ATAGTAGGTA GGTGCTCAAT

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NCACCACTTA TTGTCCTCAA ACATTATTGC ACTTTAATT TCTTAATTG ACAAAGCATT CAAGAAACAT CTGCAGACTA
GTTTAAACAG ACAAATAACA CCTGTAAGCA GACATGACTG TCCTAAATTG TTTATTAAGA AAGTTAAAGN GCAATAATGT
TTGAAGACAA TAAGTGGTG

SEQ ID NO:2016: (Length of Sequence = 293 Nucleotides)

TTTTCCTTCC CCAGAGATGC TTTATTACAT GGTTTCATCA GTCATCAATG ATGGGTCCCT ATGCCCATGC GAGGAGACAG
GAACATCTGT GTGGTACATG GCACTGTTCC OCTCTCAGCT ACGCAGTCAG ATGGGGGCAG GGGGATGAAT GGGTGCTTGG
CTTCCCTGCT GTTGGGCAGG CTCTGAGATC TCAGCAGACA GAAATGAAAG CCTGGCAAAT AGGGAGGCAG GAATGTTCAA
GCATCGGTGA CCTCCATGTT CTGCAGCCTG TTTTCTAGGG TGACGTCTCT TTG

SEQ ID NO:2017: (Length of Sequence = 504 Nucleotides)

CGCGTGCTGG CCGCGCTGTG GCGCGCTGTC TMTGCGNCCC CAGNCTCCTC GTGCGCCTGG ATATCTGTTC CAAAAACCCC
TGCCACAACG GTGGTTTATG CGAGGAGATT TCCCAAGAAG TGCGAGGAGA TGTCTTCCCC TCGTACACCT GCACGTGCCT
TAAGGGCTAC GCGGGCAACC ACTGTGAGAC GAAATGTGTC GAGCCACTGG GCATGGAGAA TGGGAACATT GCCAACTCAC
AGATGCGCGC CTCATCTGTG CGTGTGACCT TCTTNGGNTT GCAGCATTGG GTCCCGGAGC TGGCCCGCCT GAACCGCGCA
GGCATGGTCA ATGCTGGACA ACCAGCATCA ATGACGATAA CCCCTGGTTC CAGGTGAAAT TNCNCGGAG GGATNTGGGT
AACANNINTT GTTACGAAGG GTGCCANCOG TTTGGCCAGT ATTGGTACCT AAAGGCTTTA AAGGTGGCCT ANAGCTTAAT
TGENAGGATN CENITINTCC ATGT

SEQ ID NO:2018: (Length of Sequence = 354 Nucleotides)

AGANCAGACC CACAGGCATG CAGAAAGGTA GGGCAGTATG TTTAANTCCA GACTTGGCAC ATGGCTAGGG ATACTGCTCA
CTAGCTGTGG AGGTCCCTCAG GAGTGGAGAG AATGAGTAGG AGGGCAGAAG CTTCATTTT TTTCTTCTCT AAGACCCTGT
TATTTGINTT ATTTCTGCCC TTTCOGAGTC CTGCAGTGGG CTGCCCTGTA CCTGGAACCT CATGAGCCTC TAAGGGAAAG
GAGGAACAAT TAGGACGTGG CAATGAGACC TGGCAGGGCA GAGTACAAGC CCAGCACCCA GTGTCCAGN CTTACTGGGT
CCTTANCTG GGCCAAACAG GGAGGGCTGA TACC

SEQ ID NO:2019: (Length of Sequence = 295 Nucleotides)

GACACAACCT TTGAACATAT TGCTGCTGTT TTCATTTTAA AAAGGAACTT TTAATACTAA AATTATAGGA AGAACATAAT
ATCTGACGTC ACGTAAATTC AGATTTGAAG GAAATTTACT TTTTINCCCT ATTTGINCTT ATTTTTCCTC ATTTTGTAA
GAACCAGCGA ACACITTGAA GAAAGCCAAA AGTTTACATC TGGAGCTGGA GGGTTCGTG ACTGCACACC AGGCACTCTG
CCAGCCCTAC TTTGCTGTGT AGTCTGTCAG GTCATTTGCC AGAGGTGGTA CTTTC

SEQ ID NO:2020: (Length of Sequence = 217 Nucleotides)

ATTGGAACIT AAGTTTCACA AGGAAAGTGG TCACITTAGT TCACCACITT CCTTGTGAAA CTTAAGTTCC AATGGGAGAA
TGACAGTAAA CAGACAACTA TTATAATANG TCCATGGAAG ATTTTGGTGT ATGTNAGATT TNCAATCTG TAGAGAAACN
TNGGCTCATT CAATAAAAAT TTGAAACCA TTGATTAAAT TCTTAATAAC TATATGT

SEQ ID NO:2021: (Length of Sequence = 380 Nucleotides)

TTTTTCTTA AAACAACAGC AAGTGATCT TGGCTGTCTG TCATGTGTG AAGTCCATGG TTGGGTCTTG TGAAGTCTGA
GGTTTAAACAG TTTGTGTGCC TGGNGGGATT TTCTTACAGC GAAGACTTGA GTTCTCCAA GTCCCAAGAAC CCCAAGAATG
GGCAAGAAGG ATCAGGTCAG CCACTCCCTG GAGACACAGC CTCTGGCTG GGGACTGACT TGGCCATGTT CTCAGCTGAG

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GCTGCCAGGG ACAGATCCAT AAAANTCCAA AAAGGGAAGA GAGAAACAGC TTGAGTACAG CTGAATCATT CACAACAATA
TTACAAGCAA TTACITCAAT GTAAAGTCT CCACTCTAGA

SEQ ID NO:2009: (Length of Sequence = 411 Nucleotides)

ATTACGGGCA CCGGCCACCA CGCCTGGCTA GTTTTGTAT TTTTAGTAGA GACGATGTTT CACCATGTTG ACCAGGCTGG
TCTCGAACTC TTGACCTCAA GTGATCCACT CGCTTCGGCC TCCCAAAGTG CTGGGATTAT AGGCGTGAGC ACCTGTGCCC
AGCCTCACAG CTGCATCTTA ACCTTACCTT TGCTCTGCC TCTCAAGCTG GTACCTCCTA ATTTACATCC TAAGAGTGGA
ACCATGTGAC AAGGACTGGA GTGCCATTGG CTGTGGACTG TTCAGGCAGG GAAGTACAAG ACCACTCTTG TATTGAGGGG
CAACCAAAGG AGAGAATTAC GTACTGTGTG AGTACAACT GCACCAAGCC CTGGAGACCC ATTACCACCG TTAACCTCA
ATACAGCTCT G

SEQ ID NO:2010: (Length of Sequence = 311 Nucleotides)

AAGAAAGATG CCAGCTCTTT ATTACCAGGG AAGCTGTGTG CACGCGCGTG GAGGGTNCCT NTGGAGCTGA CCGGGCCCTT
ACCTTCTCCT GCTTGTGAGA GGTGAGTCTT GGTACCCAGC ACGGTGGCCT CCGGGAGGCT TTGATAGGTC AGCCTTTGCT
GCCTCCAGC TCAGGGCTCC TCCAAGGAAC CTGCGGGGCC CCATGTGCCC ACAGCCCGAG GAGGGAAGCA CCGACCGCCC
TCCTCGTGGC CAGTIGACAC ATCATCCATT TATTATCCTT CAGAGTCTAA AACTTCTCG TGATACAAG T

SEQ ID NO:2011: (Length of Sequence = 192 Nucleotides)

TCAGGACATT TCACTGAGGC CACCTACAAG CAGAAAGGAG GCCCAGGGCT AGGGACAGAN TGGCCCCAGA GCCAGTCAGC
TGCAGCAATT CTTGTGAGAA AGGGAGGGCA AGCTGCCAGA GCANTGTNGC CCAATATGAT GCCTACACGA GACAGATGTC
CCAGTAGAG TGTGTTCACT GACCTTCTAA AC

SEQ ID NO:2012: (Length of Sequence = 367 Nucleotides)

GGATGACCTT CGAGGACGTG TGCCGGTACT TCACGGACAT CATCAAGTGC CGCGTGATCA ACACATCCCA CCTGAGCATC
CACAAGACGT GGGAGGAGGC CCGGCTGCAT GCGGCTGGA CGCTGCATGA GGACCCGCGA CAGAACCGCG GTGGCGGCTG
CATCAACCAC AAGGACACCT TCTTCCAGAA CCCACAGTAC ATCTTGAAG TCAAGAAGCC AGAAGATGAA GTCTGTATCT
GCATCCAGCA GCGGCCAAAG CGTCTACGC GCGGGAGGG CAAGGGTGAG AACCTGGNCA TTGGCTTTGA CATCTACAAG
GTGGAGGAGA ACCGCCAGTA CCGCATGCAC AGCCTTCAGC ACAAGGC

SEQ ID NO:2013: (Length of Sequence = 213 Nucleotides)

GATTTTATGG AAAAAAATTT CCATTTTNNI TAAGAAATAA GGAGTTTNTG TGTCGAGGGC ATGACTACGA GAGGCTGGAA
GCTTCCAACA GAGAATGCTG AACGANTTCC CCCATGCCAT CGCCATGCAG CACGCAACC AGCCCGATGA GACCATCTTC
CAGGCAGAAG CTCAGTATTT GCAGATATAT GCTGTGACTC CCATTCCAGA GAG

SEQ ID NO:2014: (Length of Sequence = 333 Nucleotides)

GTAAATAAA ACAGCAAATT CTTAAATACA TTATGAGTAA AGAAAGATTA AAATAAGGNA ACAGTACTTA CTGTGCAACT
TTAAATTATA CCAAGTAAAG TACACCACCT ATTCACTGAT AACATTTTCC CTACGTTGAA AACACAAAAC CTACTTATCG
ATATTTTGA TATTAAAAA AAGGACATTC ACTATTGTAG CCTGACAAC TCTTCCAGTA TTTTAAACCA TTCAGATGTA
TTATGTGGGN ATATTATTA ACATAATTIN GTTAACACA TTCTTTCTA CACAACTGA ATTTTAAAG TGTCTATAAC
ATTTTCAATT ACA

SEQ ID NO:2015: (Length of Sequence = 179 Nucleotides)

SEQ ID NO:2002: (Length of Sequence = 242 Nucleotides)

AGCCAGGCCC TGGGCCCAAG CCCCTTGTC CTCTCCACT GCCCCCTTT CCAGACAGTA AAGGCCATGG TCAGTGTGT
TTCTCTGT AAACAACCC CAGCTTGTT AACAGAAATG CTAATAACCT ACTGGGAAAG ATGGAGGTCT AAATTACCTC
CAGGGTTTT CTGGGGTIT ATCACCAGTG TGGGTCCCT CTGATACCAC CAGGTTCACT CCAGGCAGAG TGGGGCGGAA
GG

SEQ ID NO:2003: (Length of Sequence = 328 Nucleotides)

ATATTCTCAC TTATAAGTGG GAGCTAAATN ATGGGAACAC ATGGACGCAT AGAAGGAC ACITTTTACAC TNCCTGGTGG
NGTGTAACT AATACAACCA CTGTGGAAA CAGTGTGGCG NTTOGTAAA GAACTAAAAG TAGATCTCCC GNTTGATCCA
GCAATCCAC TACTGGGTAT CTACCCNAA GAAAATAAGT CATTATACAA AAAAGATACT TGCACACAG TTTATAGCAG
CACAATTGCA AATGTCAAAA AATATGGGCG CAACCCAAAT GCCCATCAAT CAATGAGTGG ATAAAGGAAA TGTGAGATAT
ATATATAT

SEQ ID NO:2004: (Length of Sequence = 211 Nucleotides)

AGCCTTTTFA TTATGTNTT TTTTTTTTT TAANCGAAGG TCCTTACTG GTCTGCTTC CATGAGTAGC CGTGACCAGG
GGAAAAGGGA GAGGAACCA CCGGCACAGG GAGGGGTCT CTCCACAACA TTCCATTAT ACACAGAACT AAACAGACAA
GCACAGTTC ACTATTGGG TTAGAAGTGG GCAGCATGG AAGGGGGAGG A

SEQ ID NO:2005: (Length of Sequence = 241 Nucleotides)

CCGGGACACC GTGGGAAGG GGTGCAGTG GGGTGATGC CAGAGGAATG ATGGGCTTT NTCTGAGGG GTGTCCGAGA
GGCTGGTGA TGCACTGCT ACAGACCCA TGTGGATCT TTCTCCCTT CTCTCTCTT TTTCTCTTC ACATCTCCC
CATAGCACCC TGCCCTCATG GGACCTGCC TCCTCAGCC GTCCAGCATC AGCCATGGCC CTCCAGTGC CTCTAGCCC
C

SEQ ID NO:2006: (Length of Sequence = 266 Nucleotides)

TTCCCCCTAA CTTGTGAGT GGGCTTTTA AGTAGTAAGT AGTATACACC TAGATATGGA TAGATAGCTA GGTGACCAAA
CCTAATGGAT TAAGCCATC CTCGCTAGG TCACCTACTA AAGATCAGGT CATATGTCAT ATGTTCTCTG TGCTTTTATG
AAGTATTTG GGAATGGGT CCAGATTTT TTTAAACACA TATTAAAGAT TATTATATT ATGCTTTGTT TCCGAAAGGT
TTTAAGGTGG ATTAAATAT AAGATT

SEQ ID NO:2007: (Length of Sequence = 419 Nucleotides)

AGAAAGAGGC TTCCTCTGC GGAGCAGGT GGAGCACAGG GAGGGCTCT GGGAGGCACA GGAGTGGGT GGGGCCAGG
AAGGGGGAGG TGGACAGAGC GACTTGGATA AGGCTGGCC GGGCCACGC CCACCTCAAG AGGGGGGCG CCTCCTCAGG
AGGNATCAAG GTGCAATCCA GTCTTCTTT CTCTCCCTGA AGACCTGAGT TCCAGCCTTC ACAGAGCGTC ATGCGCATTC
TTCTTCTGG ATGCTAACCC CAAATCCGAC ACTCAATGGT GCACCTCAGG TACCTGCCAA GGTCTCTTGG GCCCAGATGG
AAGGTGCAGG GTCTGGGTCC CTGGATGAGG AGGTGAGGG CAGATGGGTG ACCAGGGAAG GGCATGACCC AGAGCTNCCG
GGACTCATGG AGGATTGG

SEQ ID NO:2008: (Length of Sequence = 360 Nucleotides)

CTTTTCTGGA GAAATAATA CGCTGTTCC TCTAATTAGC CCATCGGTTT CAGGTCATC ACTCTGCTAT CTCTCCTGG
AGTTTACACA AGCCCTTCAG AGTGTAAACA CCGATGTGGA TTCAATCCCA CTCATTATTT TTTTCAATAA AAAGAGAACT
GTTTCAACAG ACAGGTGTG TTTCCGACAT CATCAGAGAG GAAGGTGGAT GGTCTATAC GGTAAGCAAT CTACCTTCA

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CTGCCCAGCC TCAGGCTGCT GCGCTCTCTC GGCTTTTACG GACCTCTGAG GCGAAACCC CACCTOGAAG TTTCCCCGTG
ACAGTGCGTC CGAGTCCACA T

SEQ ID NO:1996: (Length of Sequence = 316 Nucleotides)

GCATATGGTT GGTGAACAGT TTTGCAGCCC TAGGCTCCTG TACTGTGCGT GCACCGCCGC CCGGGCAGCC GCTGGCTCCA
GCTCACGAAA CAGCCCCGGG CGCCGCGCG CTCTGAGTCC AGCCTCCTAC TGAGAACAGT CCTCCCTTG TCGGGGTGCG
ACGGCTAGCC GCAGGTTCCG CCACGTCAAA TCCATTTTNT AAAAAAGCAG GGAGCAGAGC TCTCTCTTCG CCGCCGACGC
AGAAAGGAGC TNGGGAGGAA AAAGCTGCTG CCTTTTGCGC TGGAGATTG TGGCAAGGC TTCTCATTTT CCCAGG

SEQ ID NO:1997: (Length of Sequence = 320 Nucleotides)

GCAGGTTTAT GTTTTATTT ATGTATTTA ACTGACTTAT TTGTGTATCC CACTAGAACA ATACATTAC AATATACTTG
CAGAACTGTG CCTGGNGCAT CATGGGAGCA GAGAACTTGT CCACTGAATA GTTGTGAAG AAAGNGTAA AATCTCCCC
AAACCCTAAA GGCATCCTTT TCGTAGTGTG TGTCCCATAG GTATGGCTGC TGAGCACCAG GGCTGCTCAC CATGCTCCCA
AGAAGCAGAG TCAGGGAGGC AGACAGCAGG GTTTATTAAG GTGCACANCC ATGTCTGAGC CCCAGCTCTC TCCGCTCTCT

SEQ ID NO:1998: (Length of Sequence = 395 Nucleotides)

TTTGATGCTA TGGCGCTGGA CCCAGGGCCC TCCAGGCCA TCTCTGTCC TCTGGGGTGG TCCAGTTCTA GAGTGGGAGA
AAGGGAGTCA GGCGCATGG GAATCGTGGT TCCAGTCTGG TTGCAGAATC TGCACATTG CCAAGAAAT TTCCCTGTTT
GGAAAGTTTG CCCAGCTTT CCGGGGCACA CCACCTTTTG TCCCAAGTGT CTGCCGGTGC ACCAATCTGC CTGCCACACA
TTGACCAAGC CAGACCCGGT TCACCCAGCT CGAGGATCCC AGGTTGAAGA GTGGCCCTT GAGGCCCTGG AAAGACCAAT
CACTGGACTT CTTCCCTTGA GAGTCAGAGG TCANCCGTGA TTCTGCCTGC AACTTATCAT TGATCTGCAG TGATT

SEQ ID NO:1999: (Length of Sequence = 337 Nucleotides)

GAAAGTATTT GTGTGATTGA GTCACAGCT GAATCAATCT TCATATAATG CCATTTTTCG TTAAGAAT GCCAGACTTG
GGCATTAGGC TGACATTTTC TTGAAACAG TGAGGCTTTG CTTTAGGGAA AATAGTGGTA GTATTTATGG TCGATGATAA
AGTTCTAGA TTTTAAAGCA AAATTTTAGA AAGCTTGTAT CAGCTGCTGT AAGTATATAA TGAATCTGT CATTTATTGA
TTATCTGCAT AACTGAGTCA GTATTTCCAA ATGATCAATG CATAGTATTA TAAAATCAT ACATGGGTAA GAAATCTTTA
CAAAGTGTC GCTAGAC

SEQ ID NO:2000: (Length of Sequence = 329 Nucleotides)

ATGTAGCCCC CTGCTGCAA GGTGCCATCT TTTTNCCTGCT GCTCACACAG CAGCGTCTC AGGGCCTGCC TGCATGGCAG
NNTCATCATG GGAAGCCCA CAGCCACTGA CATCATGAAG CCCACACGA GCATCTCOGT CACCAGGTG GAGGGAAAGT
GCATGAGCAC GTTTGCGGC CGTGGCTCG GTGAAGCTGA CGTAGCCGAA AAACCCACC ATGACGTAGG AAGGTGGTGA
CCACATTAAG GGAGGAAGCA AATATGAGC TCATGGTTT CACTTGACGG GCTCATCCAG GCTGTCTAG GTGGGCAGCA
CCTGGGACT

SEQ ID NO:2001: (Length of Sequence = 308 Nucleotides)

AAGTCTGGGG TTTGGTAGGC TCCAGGATT TCCCTCAGCA GGCAATTTTG CTGCCGAGG GCGTCTGGG TGCCCCGAG
GTCTCTCTGG ATGCTCTGTA GCTGCGGTG GAACGACTCC CTCACTGACT GTGTGGCAA GCTGAGCTCT GCCCTGACCC
ATGTGGCAAT GGCCAGGATG GGGGCCANGC CCTGTGGGAT GCTTTGCTGC CCGTNTCTG AGGCACCGAC TGCCCTCTCT
CCCAGTGTCC CCAAGTGCTT CCTCAGAGAC TCAACCTGGN TCCAGAATC ACCATCCACT AGGACCTT

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SEQ ID NO:1989: (Length of Sequence = 193 Nucleotides)

CTCCCTGTAG GTCATGTCCT TGAGAGTTAA AAGATGGGTT GAGTAGGCAG AGGTCTCAGG CACCGGGGAC AGAAGACAAG
 GACATTGAGC ACGGGCAGCC ATGCTCTTCC CAGCACCCAG AAAAGGCCCA GGGCCCGGAC TCCTGGGTGT GGTGATGAGA
 AGCGCCTCCG ATTCAGCCTC TTCTCTTCTT GTG

SEQ ID NO:1990: (Length of Sequence = 223 Nucleotides)

CTGCTTCATT TACCACCACC AGCGATGGA CCAGTTTATT GGATTCACCT ATGATACCAG GACTTTTCCA TTCAATTCAA
 TTCAACAAAC TTTTAGAGAT CGCCCTTATT CCAAGCTCAT CCAGGTCTG CTTCATGAAG GCAGGCTTTG GCATATCAGA
 CATAAAAAGC TGGAGGAAC TGAAGATTCT TTTGTGGGTA AGTATATAAA GTGCATTCCT ACT

SEQ ID NO:1991: (Length of Sequence = 385 Nucleotides)

GCAGAGAAAG TGCCAGGCAT CAACCCCACT TTGCTGTCC TGCAGCTCTA CCATTCCCCC TTCTTTGGCG ACGAGTCAAA
 CAAGCCAATC CTGCTGCCA ATGAGTCACA GTCTTTGAG CGGTGGGTGC AGCTCCTCGA CCAGATCCCA TCATACGACA
 CCCACAAGAT CGCGTCTCTG TATGTTGGAG AAGGCCAGAG CAACAGCGAG CTCGCCATCC TGTCGAATGA GCATGGCTCC
 TACAGGTACA CGGAGTTCCT GACGGGCTG GCGCGCTCA TCGAGCTGAA GGACTNCCAG CCGGACAAGG TGTACCTGGG
 AGGCCTTGAC GTGTGTGTGT AGGACGCCA GTTCAACTAC TNCINGCAG ATGACATCAT GGAAG

SEQ ID NO:1992: (Length of Sequence = 312 Nucleotides)

GGCTTACAGG ACAGAAAGGT CCCCTCTCAC AGTTTGGGAG GTCCGAAGTC TGAAGTGAAG CTGTCAGCAG GGCCACACCC
 CCTCTGGATG CTCCAGGGGA GGGTCTTTG CCTCTTCCAG TTCTGGTGGC TCCAGGCATT CCTTGCTTTA TGGTGGCATC
 ATTCACTCTT GCTCGTCTT CAGTGGCCT TCTCTGTGT GTCAAATCTC CTCTCTGTG CTCTGTGAAA AACACTGTG
 ATTGGGATTT AGGNGCCACC CCAATCTAGA TGGTCTCATC TTGAGCCTTT ACTTTAGTTA CCTCTGCAAA GA

SEQ ID NO:1993: (Length of Sequence = 429 Nucleotides)

CTGTTTTTAC TCGACGAGGA GAAGACCTTT TCATGTGTAT GGACATACAG CTGTTGAAG CACTGTGTGG CTTCAGAAG
 CCAATATCTA CTCTGACAA CGAACCATC GTCATCACCT CTCATCCAGG TCAGATTGTC AAGCATGGAG ATATCAAGTG
 TGTACTAAAT GAAGGCATGC CAATTTATCG TAGACCATAT GAAAAGGTC GCCTAATCAT CGAATTTAAG GTAACTTTT
 CTGAGAATGG CTTTCTCTCT CCTGATAAAC TGTCTTTNCT GGAAAACTC CTACCGGAGA GGAAGGAAGG GAAGAGACTN
 ATGAGATGGA CCAAGTAGAA CTGGTGGGAC TTINGATCCC AATCAGGAAA GACGGCGNCA CTNCAATGGG GGAAGCATAT
 GAGGGATGAT GGACCATCAT CCCAGAGGT

SEQ ID NO:1994: (Length of Sequence = 377 Nucleotides)

TGGGGTGGC AAACAGTTG CCCCTGTCTT GTGTCAGCA GCTGTGGCAA TTTACCCCTT ATTCCCTTGA GAGGCCAGCT
 GCCTGCTGGA AGGAGTCAGA AGTCGGTGA GTGATTGAG GCCTTGGAGG CCCCACTG GCGGGAGAGA AATCCACACC
 TGTGCCTGGA GTTCTCCTTC CCTGACCCTC TGAACCGCG CTTAAATGTC TGTCCCGCTT GGAACAGGGA GGCCACATCC
 AGCAGTGGT CCTCAATGTG CTGCCCCAGC CTGTGGGAAT CCGTTTTTGT GCTTGATTTT TTGCTGGAGA TGTGGAAGGT
 GATCATGCCA TCCCCCATGA AGATATAAGA AACANCATAA CCATGGTTCAT CAGCAGG

SEQ ID NO:1995: (Length of Sequence = 341 Nucleotides)

GGACCTATAT GGCCATGCTC TGCTCTACC CTGTGGGAAG CTGATCCCGG TGTGTGGCCC AGCTTGTGTA GGCCCTGGGA
 TGCTGCATCT CCAGGCAACT ATGCACTTTC CCGGGGAGAG AACCAGTATG AGAAGTGGG GCAGGGCACA CATTCATCTT
 TGTACCTGCC TCTTTGGTTT GGACCTGGCC AGTCGGGTCA CTGCTCCAC GTCTGAGGCC CCGCCAGCTG GCGTCTGTG

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CAAGCCCCCT TTGCTAGCTC TTCTCATCT GTCCAGCCCT AACCTGACCG TGCTATGTAA GTCTTCTCCG TTTTACCCC
CTNCCNGGGT GACCGTTATA CTNCCAAACC TACAGG

SEQ ID NO:1982: (Length of Sequence = 288 Nucleotides)

GCTGCAGAGA GGTGTINTCC AGGAGCAGGC TTTCCTGCTC GGGATCCAGG TCATCCCCCA CCAGAGAAAT TTCACAGCCA
TCCAGGTTGT GCACAATCTC ATCCGACATG CGTGTINTCTG TCACTGTGCC CTGCCAACTC TCATCCTTTT TGGCCTCCAC
CTGGTGAGAA ATGGAGCAGG TGATTGAAG ATCAGGGAAC AAAGGGACGC CGTTGGTTCC CTCAAAGTCC ACAGCTNGGC
GGGCAAAATG AGCAGTGCCA CTCAGCAGGA TCTGGGGGGC GTCAGGCT

SEQ ID NO:1983: (Length of Sequence = 273 Nucleotides)

CACAAGCCAC TTTCAGCCTC CAGTGGGAAG GCTCCAGCCA CACGCCGATA TTTCGTCTCG CTTCCTGTC TCTCATATCT
AAAAGTCATG GCTTAAGTTA GGCAATAAAA CCTGTGGCTT TAGGCATCTT TAGTAAAAA GCTGAACAAA TCCCAAATTT
ATTCCCAITTT TCTTGAGAAA TAACTTCAT AAAACAACAG ACAGCTGTCA TGATTACTGA GTTTTGGCTG ATGGCGAAAT
AATTTTTATG TAAGTATACT GAATAACAT ACA

SEQ ID NO:1984: (Length of Sequence = 221 Nucleotides)

GAAGAGGCTG CTCGTGCCTG GGACACCCC ACTGCTCTCA AGGAGCTGGC ATCTCAGTGG CCTCTNAGCC CAGCCTGAGC
CCTGTGGGAG TNCGGGGGCA GTGACTGGAA TGINTGTCTG GGCAGGCTGC AGCAGCCGAG GTGGCCCCAG GGCAGAGGAG
TGCAGCGCAN CTCATGGGTG CCCTATGCCA CCCCTGGTGC TCACTGGGCT GCTGATGCCG T

SEQ ID NO:1985: (Length of Sequence = 197 Nucleotides)

TTGTACCAT GAGGGAAGTG CTCGTTGCTT GGCTACAGC AAGTNATACA GCCTGCGAGG CACAGTCCCC AAAAGTCTAG
CTGCAATTCT ATTGGTGGTT TTCCCCAAC AGCAATAACA AGATGTTACC TGGAAGCACA CCAGAGCCAA TCATGACTCA
GGCCTGTCTA GATGTTTAGA TGTCTGGAAA TATATTT

SEQ ID NO:1986: (Length of Sequence = 268 Nucleotides)

CAGTTGGACA TTCTCTTTA TTGTTACAT TCCAACCCAG CACAGTCACA TGCACACAG GAGATCAGAA ACCTTTNGGC
CACAGCCCCA GGAGCCCGGC GGGGGGGAGG GCGGGACCGA CAGGGGCGGG GCGGGGCGT GGAAGACTCC TCCTACCGAG
CCTCCAGGC GNTCGCGTT TGCATAAACA AGAGAGCTGG AGAGGNTGCC CTCAACAGTG CGCTGGGGAA AGGGGAGGGA
ACGTGACAGG CAGGTNNGG ATAGGGAC

SEQ ID NO:1987: (Length of Sequence = 282 Nucleotides)

GTCTCACTG TAAACAAATG AGGATGGAGG AACTGAGAG GNTCAAATAT GAAAGGCAGT ATGGGGAGTT AGAGCCACTC
GTCTACTCCT GTAAAGAGCA TGACTACTCA CAGTCTTTCT AGCGGGTAGT CACTCTTTCA TTTAACAAT ACTTAGTCCC
TGCAATGATC TAGGATAATA ACTCAACAGT GTATATCAAG AGCCTTTAAA AAGTTATACC TGGCGGGCG CAGTGGCTCA
TGTAATGTAAC CCTAGCACTT TGGGAGGCCA AGGCAGGCAG AT

SEQ ID NO:1988: (Length of Sequence = 226 Nucleotides)

GTGAGGGGGT TCGGTCTCTC AGGAAGTTAG GCCATAATTT CTGCAGGTC AGTGATTAAC TTGGATCCAT CCCATGCTGT
CTTGAAGTGT TCAGGAATGG GAAATTCTCT ATAATACCA TCCTGAGGGA TAAGTATGTT CATTTCAGAT GACTTGGCGC
TCACGNTCTC ACAGTCTAAT GCATCTTCAC TGAGGTATAT GTGGCAACCT TCTGTCTTAT TAATGG

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SEQ ID NO:1974: (Length of Sequence = 304 Nucleotides)

GGATGAGATG ATCGACGTCA TCGGGGTGAC CAAGGGCAA GGCTACAAAG GGGTCACCAG TCGTTGGCAC ACCAAGAAGC
TGCCCCGCAA GACCCACOGA GGCCTGCGCA AGGTGGCCTG TATTGGGGCA TGGCATCCTG CTGTGTAGC CTTCTCTGTG
GCACGCGCTG GGCAGAAAGG CTACCATCAC CGCACTGAGA TCAACAAGAA GATTTATAAG ATTGGCCAGG GCTACCTTAT
CAAGGACGGC AAGCTGATCA AGAACAAATGC CTCCTGAC TATGACCTAT CTGACAAGAG CATC

SEQ ID NO:1975: (Length of Sequence = 233 Nucleotides)

CCTTCTCCAT CACCCITGGA CCTCTCTGA GTGGTCTCTC AAGGCACATT TATTTCTCT GCTGCAACCT ACCAGATCTG
ACATCCACCT CCCCAGCAC CCATGGGCA AGGAGGCCTG GGGCAGCCAA GGGGAGTTC AGGACCAAGC AAGCAAGAAA
CCGTTCTTTG AACACATGGT TAAGCTTCTT CCAGCATGGC CCTAATTCCC CTACCTGCCT AAGCCAGGGG AGT

SEQ ID NO:1976: (Length of Sequence = 162 Nucleotides)

AAGTGTACA AGCCCCAGAA TGCTGCCCG CCTGCCCTGC TGGGCGGACT GTCTGTGTGT CTGINTCTCT GCGTTCCAC
CTCCAAGCT ATACCAGCTG TGTACAGGC CATCTCTCTG CCTTCTGTG CCCCTCACTC ACCAAACAG TGTATTTATA
GC

SEQ ID NO:1977: (Length of Sequence = 270 Nucleotides)

GGCTGAATTA AGAGCATCCA GAAAGCCCAG GCCTCCATA GGCTGTGGCG GGATGATCTT CACTTTGATC TCTTTGGTGG
CATTAGGTGT TGTGTGAGT GGCTGTATT TCTTCTCTG AGGGGAGTG GCATCTCTG GAGCAGCTAC GTTGCTCTGA
CGTTTGAGGG GGATGGGTTT AAGGTGTAC TTGTCAGAAA CCACCACTGT GCTGGCATTC TTCTTCACAG GCACCAAGGA
TGGTGTCTCC AGCTCTAGTC CAGTGAACG

SEQ ID NO:1978: (Length of Sequence = 167 Nucleotides)

TTGCAGGAGT TGCTGATATT TATTCAAACG TCATCCATAC AATAAAGAAC TCINCTTTTA AAATTCCATT TACATCAGCA
GTAAAAAAA AGTGACAGTG GATGAAACAT GANGCTGTAA AGTGCTTTA TGGGGAATNC AGCCAGCCT GCCTCCACTG
TGCTGGG

SEQ ID NO:1979: (Length of Sequence = 346 Nucleotides)

CATCATAGCA ACAAAGGGCT ATGTACTATA CTCAGGAAAA CCAATTATTT GCACTGGAGG CAACTGTTCT TGAGAGAGGA
AAAGTAAATT GTCCAAGATG TAACATCTTA TAAATAGCAA AGCAAGGATG AAAATTATTA TATTINACTA AATCAGTATG
AGAATCCTGA TTCTTCATTA TTATATCCCC AACACTCTAT CAGTTTGTG AACAAATCAA CAAATAAGCT TGAATAAAGG
NTCCACATCT CAATCTCTCT CCACCATCT ATATTGCCCT TCATCCCTAC ATTAAATGN TTATTTCTGC TTTTTTCTT
TAACAATTA TCCCTAAAGT AACTAG

SEQ ID NO:1980: (Length of Sequence = 174 Nucleotides)

CACAACTGA CAGAGGAGAC AGGAGGAATT TAATATTACA TGCTATAATG ATATTTATCT CACAGTTTAT ATTTCAITCA
TTTATATTAT TTTTAAAAA GGTTCCTTA TCAGCTACTA AACATCTCAG CAATTGGTG TGCTAGCTC TAGATTAGC
AACAAAGAA TGTA

SEQ ID NO:1981: (Length of Sequence = 276 Nucleotides)

TGNTCACTC ATAAGTTTC AGTGGTTAAT TACTACAGTT TAAGAAGACG TGATTTAT TTTTAGATCT GACCCAGCAG
ATCATACCTN TNCNTGAAT TACATGGTCT TCTTTGGCT TCTAAGATGT CACACTCCTG TCTTAGTGGC CACTGCTCCT

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SEQ ID NO:1967: (Length of Sequence = 296 Nucleotides)

GCTCTGCTGG CCGTGCAGAA GCTCATGGTG CACAACCTGG AATACCTTGG CAAGCAGCTC CAGTCCGAGC AGCCCCAGAC
 CGCTGCCGCC CGAAGCTAAG CCTGCCTCTG GCGTTCCCTT CCGCTCAAT GCAGAACCAG TAGTGGGAGC ACTGTGTTTA
 GAGTTAAGAG TGAACACTGT TTGATTTTAC TTGGAATTTT CTCTGTTATA TAGCTTTTCC CAATGCTAAT TTCCAAACAA
 CAACAACAAA ATAACATGTT TGCCTGTATA GTTGATATAA AGTAGGTGAT TCTGTA

SEQ ID NO:1968: (Length of Sequence = 311 Nucleotides)

ACCCCTTCA CTCCTCCCA CCAGCTCTGC AGCCAGCCTA TGGCAATTAT ATTTTAAGAG GTGTTCCCAG GACTTTTGGG
 ACCTACTAAA ACAATGATGG TTATTTTAGA TGTGATGATT TATATTTATG TAGAGATATT TCTGGACCAC TCAAGCTCTT
 CGATACAAA ATCAGGAGCA TCTTGGGATT TATTAAATTA TGTAAGAAGA TAGCACAGAT ATCGGGATAT TATTGTGTGA
 AAATGCTGCT TTTACTTTGA TGTGATCTCA TTGATGTACA CAACCAAGTT CCAATAAAGT GCTAGAATGT G

SEQ ID NO:1969: (Length of Sequence = 266 Nucleotides)

CAATAATAAA AAGGATTATA TTCTGATAC ATGCAATATG GGTAACCGT AAAAATATCA TGCTGAGCAA GAGAAGCCAA
 ACACAAGAGA ACATGTTGTT ATGATTTTAC GTACATGAAA CTTTAGTAAA GACAAGTCTA ATCCATAGTG ACAGAAAGCA
 AATCAGTAAC TGCTGACAGG GGCAAATGAG GNGATGATCT CAAGGNAACC TTCTGGGGTA AGACGCTGTT CTGTATCTCG
 ATCGNATTGG TGGTCACACA AGTGAA

SEQ ID NO:1970: (Length of Sequence = 317 Nucleotides)

CTCGGGAGGC TGAGGCAGAA GAATGGGTTG AGGCCAGGAG GCGGAGGTTG CAGTGAGCCA AGATTGCGCC ATTGTACTCC
 AGCCTGGGCC ACAAGATTGA AACTTCATCT CGGGGAAAAA AAAAATGAGC TAAATACAAG AGATGGTAAT GCAGGAAATG
 AGAGAGAAAG AAGCTATAGA ATGCACCATC AGTCTTTGCT GAGAGGAGAA GCTAGGACAC TTATGCGCAT GTNCCTGTCT
 GCGTTCCTTC CCGTCCCGCG GATGGTTGGA GCAGGTCTTT GTTTGCTGCA GAGCATGCCA TGTATCCTC CTGTCT

SEQ ID NO:1971: (Length of Sequence = 263 Nucleotides)

GTGCATACTG CTGAGGCGGC TACGCTGGCA GGGTAAGCAA AAGAAGCACC CCAGCCTAAG TTTACAGAGA ACCAGGACAT
 CATTTTGAAT ATAACCTAGT TCTAATAGTC AAATGGCCAC TCAAGGTGAC AAATAGGAAC TTCAGTGGTC ACCCTCGGA
 AGCAAGCTTT CAATGTCCTC CACCTGTAGA AGGCTGAAAA ACATCCTCCA AAGATAACAG GTTCCAATCA CTGGAACCTG
 TATTACTTAT TACCATTAAA TAT

SEQ ID NO:1972: (Length of Sequence = 295 Nucleotides)

GACAAAGAAA GCAGAATAAT TTTACCTGAG AAGAAACCAG GAGGCTCTT CTCTTCTTC TCTCTTTTT TTTTTTTTT
 TTTTGGACTA TACAGAAGAA AACTATCAGA GTTAGGTTAG AGAGTTGGGT TTGGGGTCAG GTGTAGCAT GTGTTATATT
 ATGGGTTAAA TTGTGTCCTC CCCAAAATTA ATATGTTGAA GTCTTAACTC CCTGTACCTC AGAATGTGAC CNCATGGGGA
 AATAAGGTCA TTGCAATATA ATTAGGTAAA ATAAGGTCAT ACTAGAAGAG GGTAG

SEQ ID NO:1973: (Length of Sequence = 243 Nucleotides)

AGACCGCAGT CATCCTCAGC ACTACACGCA GGCCATNINC AAGCTGACCG CAATGCTCAT TAGCAGTAAA GATTGTNACC
 CGCAGCTCCT TCATCATCTG TNCIGGGGTC CCCTCGGAT GTTCAATGAG CATGGCATGG AGACGGCCCT GGCTGTCTGG
 GAGTGGCTGC TGGCTGGCAA GGATGGAGTG GAAGTGCCGT TNATGCGGA GATGGCAGG GCCTGGCACA TGACGGTGCN
 GCA

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GACTACAGGT GTGCCCCACG ATGCCTGGCT AATTTTAAAG GTTTTGTAG AGATGGGGTC TTCCTATCTT GCACAGACTG
GTGTGGAATT CCTAGCTCAA GCAATTTTCC TGTCTCAGCC TCACAAAGTG CTGGTATTAC COGTGTGAGC CACCGTGCTC
AGCCCAGTCA TGTATTCTTA ATTATTGTAT TTGTGAACATA ATCTATGAAC AACAAAAACA AACAAACAAA CAAAAAGGGT
GGCATTTCCTG GGCCACCAGG GAAGGTGGGA TTGGGGTTGC AGCTATTTTC AAATTATATT AAAAGCAGGA TCCAGTTAG
AGCGCTATC

SEQ ID NO:1961: (Length of Sequence = 282 Nucleotides)

ATCCTCCAC CTCAGCTTCC CAAAGTGGTG AGATTACAGG NTOGAGCCAT CGCACCOCGC CCAATTATTC TTTCTAAACC
ATTTCCTCTT CTGTGTTCAT GCCTTTAAAA ATAAATTA AAAAAAAAAA AAAAAAATC CTTAAATTT CTCAGGTGTT
TTCCATATCA TTTTATTATC AAGAATATGG CTAATCAGAA GTCACAGCCA GCCCCGAAC TACAACTACA AAACATGCAT
ATTATAGGCT AACTGAGGG ATTTCTGAGG TTAGCAGATG CA

SEQ ID NO:1962: (Length of Sequence = 328 Nucleotides)

TGCTGGTGTG CCTGCTGTCA TCCTCAGGAG GCCAATCAG TCCAGCCTC TCCCACCATC TTCCTGCAG CGATTTCCTC
GAGCTCGAAA CATCTCTGGC GTGTCTCTGG CTGACCACTC TGGTGCTTC CATAACAAAT ATTACCAGAG TATTTACGAC
ACTGCTGAGA ACAATTAATGT GAGCTATCCC GAATGGCTGA GCCCTGAAGA GGACCTGAAC TTTGTACAG ACACGTCCAA
GGCCCTGGCA GATGTGGCCA CGGTGCTGGG ACGTCTCTG TATGAGCTTG CAGGAGGAAC CAACTTCAGC GACACAGTTC
AGGCTGAT

SEQ ID NO:1963: (Length of Sequence = 277 Nucleotides)

CCAAGAGACA CCCCCGCAC TCCTGTGCCC GAGCTGTCTC ATCTGTGATT CACAGTCTGC TCTTTCTGGC TGCTTGTGCT
GAGAAGTGAT TTINAACCC GAGGTTAGAA AGGGAGCTAT TTTTGAGCTG CTTTTGTGTA AAAGGCAAAT TTTCTGCTGG
GGACTGGCTT TACCCGTCT ACCTAAATCA TTTCTTACTG CCTCCTGTAA CAGTCGCCCT TGTGTCTCTG CTGGNATTG
TTTGAACACA GTCCACAGGT TCAGTGGTIN CATCTCT

SEQ ID NO:1964: (Length of Sequence = 230 Nucleotides)

CAATGCAACC TTTTAATTCC AAGCAGAGTC CCCCTCCCC AGCATGGTCA CACACACAGT GGAAAGGGAT GTCAGGGTCT
GGGCAGGAGC AATACCCAGA CTTGGGCAAA AATATAGATA TCATTATATA CACACGTGGA CTGGAAAGAA GTCAAGCTGG
GGGTGTAAGG TAGGGCAGGG GCAGGTGAGG AAAGCAGCTG GGGGGGCCCC AATAAATTAC ATTCTTGAGA

SEQ ID NO:1965: (Length of Sequence = 299 Nucleotides)

CGCGTGGAT CCGAGAAGG CACAGCAGAT GCGCTTCCAG GTGCATACCC ACCTTCAAGT GATTGAGGAG AGGGTGAATC
AGAGCCTGGG CCTGCTTGAC CAGAACCCCC ACCTGGCTCA GGAGCTGCGG CCCCAAATCC AGGAACCTCT CCACTCTGAA
CACCTGGGTC CCAGTGAATT GGAAGCCCCT GCCCTGGGG GCAGCAGOGA GGACAAGGGT GGGCTGCAGC CTCCAGATTG
CAAGGATGCA GACACCCCA TGACCTTCC AAAAGGGTCC ACAGAACAAG ATGCTNCAT

SEQ ID NO:1966: (Length of Sequence = 320 Nucleotides)

GTCCCTGCAC ATGCGTCTGG CAAGACGGGT CAGCTTGTG GTCTGAAGCA GGAAAGTTTG TCTGTNCTTA GCCAGTAGCT
TGGCCCTGTT GCGCTGGT GTGTAAAGGAG AGAGACTTGT AGCTTCAGGT CTGGATAAAT NACCCCTTGA GTGTGGCTCC
GTGGTGCCCC GAGTGGCCCC CTCAAGCTGA GTTGGGGTCT TCAGTCCCC ATACTTCTTC CAGTAGATCC AACAGGAAGC
ACAGAGGGGG CACTGCATGT TAGGTGGGCC CCAGGCATAC CACTGAGCAG ACTGTGTGGT GTGGCAACTC TCACAAGTCA

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CTTAGTGCTT ACCTCTTAAA GAAGGGCTGC TGTGAGGAT TCCNTGAGAT AGTGTGAA AA

SEQ ID NO:1954: (Length of Sequence = 389 Nucleotides)

GGAAAAGCGG GACCCAAACA GTGGTGCTGG GGAAATTTGT TCGTGTCCC TTGGAAGGC TGAGTGGGTG ATGCAGCACA
GGAACAAGGC TTGGACGTCA GAGGTCTCAT CTTCACTGTG ACAAAGCATA AAGGACTTGG GGTGAGCGT GTGTNTGGGC
TCAAGTGACC ATGCAAGTNC TGTCACCTCC TTCCTAAGAC CCCATCCTTC TCCCAAGTCC TCCACAAGAG CTACCTTCTT
CAAAACAATA ACAGAAACAC ATCAAGNTTN GCGTCACTGA AATTGAAGTT CTGAATTCTG CCGTCACCCC AGCAACAGTG
CCAGTTATGA TGAGACACTT GACCCAGCAC TTGGGTTGAT GTCTTTGGCT GTTACCGTGG CACCTAGGT

SEQ ID NO:1955: (Length of Sequence = 277 Nucleotides)

GCCTCTAACT CCACGGCTCA AGTAATCCTC CTGCCTCAGC CTCCTAAGTA GCTAGGACTA CAGGTGCACA CCACCACACC
CAGCTAATTT TTTTNCITTT TGATTTTGG TAGAGATAAG GTCCTACTAT GTTGCCAGG CTGGTCTGAA ACTCCTGGCC
TCAAGTGATC TGTCTTAGCC TTCGAGTAG CTAGAACTAG TTTTAATGAC CNAAGAATT ATGTGTTTAC CNGTGATTTT
ATGTGTTTTG TTAAGACATT CAGAATTTAG AGAAATG

SEQ ID NO:1956: (Length of Sequence = 380 Nucleotides)

GTGTAATGTT CTGAGGGTGG CGAATGCAGG GCGCGTTCC TCCCGCTGTC GATCTGGAAC ATCTTCTCGC CAACAAAGAG
CAGGGTGAAG ATGAGGGCAA GCTGGTAGAC AGCATGGCCC AGGATGTTCT TCATCATGGT CTTGGAGATG AGCGGCTTGT
TGCGGCCGTA CGGTTTCTC AGCAGCAGGG TCTCGTGGG CGGCTCAGTG GCCAGTGCCA GCNAGGCAAA CGTGTCCATG
ATGAGGTTCA CCCAGAGCAT CTGCACGGCC TTCAGAGGGG AGTCCTGCGT GATGCAGGCG CTTNTAAAGC CACAATCAGC
GCCACCAGT TGACGGTGAA GCTGGAACCT CAAGAATTIN GAGATGCTGT CATAGACGTT

SEQ ID NO:1957: (Length of Sequence = 328 Nucleotides)

TGTGATGTTT CTTTTTTCAGC CTGTGATGT GGTGAATGTT ACTGATGAT ATTGAATAT TAACTGGCT TTGCATCCCT
AGAAATATACC TCACCAGGTC ACTGTGTACT AGGTGGTGC AAAAGTGCTT GCCATTTTGG ACCATGAATT TTGAATCATT
AAACTAGGC TCAAACACAT CTGTATTAT CAAAGTAAGA ACCATTACAA TCAACACAAT TTTGCCAACA AGAAATAAGT
TTGTTTACTC CTGTAGCATA AAAATCCGTG CTTTGAGATT CGAGGAACCT TTGNAAGCA CTTTCTGCAT CTTGCTGGTT
GTGGAAGC

SEQ ID NO:1958: (Length of Sequence = 254 Nucleotides)

CTAGAAAGTA TCTTCTCTTT ATTTAAGTTA ACAAATTTTC AAGGATGGTT TCCATCTATA AAATGGACAA AGTACAAGCT
CTGTACAGCA GTTCTTTTGA AAAATCAACT GGAAAAAAA ATTACCAAC TATATTTTGA ATTTGCAAAA CATACTCACA
GATACCATCA TCTGAGCTTT TATGAGNCA TAAGAAAGGN CCACCACAGA GAAGACAACCT AACTTGGCA CGCTTTGCTC
GAAGGGCTCT TAGG

SEQ ID NO:1959: (Length of Sequence = 259 Nucleotides)

GTAATACGAG AAAAATCACA ACAGAGTAAT AAAGATATAA AACTTTTACA ATTAACACTC ATCAGTGTGA TAACTAAGC
CCATGTAAAA GTAAAAATCT CTCACAGTTA ACAAACGTCT TTAATTTTAC TAAGAAGGAA CTGAAATTAA AGTCCTTAGT
CACTTTGGAG GTGGCTGCAA AAGCTCACAA CATAGTTGAT CCTTAAATA ATTATGAATG GCAACCAGTG CTGCCTTTCT
GTACTCAACC ATGCAACTG

SEQ ID NO:1960: (Length of Sequence = 329 Nucleotides)

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SEQ ID NO:1948: (Length of Sequence = 349 Nucleotides)

TTACAATCTG GCTGGAAACA GATAATTAGA ACATATCAG AGAAACAGAA CAGTTAAGTG CCAAGCTCTG GTGGAGGTTT
 TAAGTGCCAG AGGTCAGGAT ATATTTTAA GTGCTTCTGC TTCCAAACAT CACTCTTTCA AAACAAAACA CAAAGATCCC
 CAACCAGCAT TTCTGCCCC TGAGGCACCA GCAAGGTATA TAAACGGGCT TGCAAAGTTT GATATACGGT CTCCAGCCTG
 GCTTTCTTTA GTCTGGGCTC AAAAGCCAGA AACCTCTGGG GGCCAGAGAA GCGCTCTTTG TTGCCAAAC AGCATCTCTG
 CACATCCTGT TCTACAGCAC CGTCAGTTT

SEQ ID NO:1949: (Length of Sequence = 378 Nucleotides)

TTCAATCTCG ATTTTATCCC AGCTGTGGG GATATTGATG CATCTTAA GGTCCCAGT CCTGATGGAA AGCCTGACAA
 CCTTGGCTTA TTGGTATTGG ATGAACCTTC TACAAAGCAG TCAGACCTTA CGGTGCTCTC ACTCTGGTTA ACAGAGAATT
 CTAAGCAGCA CAACATCACA CAACATATGA AAGTAAAAG CCTAGAAGAT GCAGAAAAGA ATCCCAAAGC CATTGACACG
 TGGATTGAGA GCATCTCTGA ATTACACCGT TCTAAGCCCC CTGCGACTGT GCACTACACC AGGGCCATGC CCGACATTGA
 CACGCTGATG CAGGAATGGT NCCCGGAGTT TGAAGAGCTT TTGGGCAAGG TAAGCCTG

SEQ ID NO:1950: (Length of Sequence = 357 Nucleotides)

TCATTAACIT TACGAATGAA AGAAAACAAT TCCATCCCTC TCACAAAAG GACATCTTTT AAGCTTTCTT CCCAATCTAA
 CCTCCATGGG ATCTCAGAAA TTCCAATTCT TATAACTCAA ATCCCCACAG TGGTGTAGAT GCATTAACTC CCGGGGACA
 GCAATCTGAG GCAGGCAGGT TCATTAAACA AACATGTTCT GTGCCCTCTG GCAGAGAGGG CAGCAGGACA TGCCTGCCCC
 CTGAGCCAAG CTGTGGCATG GGCAAGGACA TCAAGTAGCT GACAACGGTC TGTCCATCTC AGCTGGGGCA GAGGGGCCAG
 TTCAGCCTTG AACAGCAGT TNGGGAGTGT CTCAGCT

SEQ ID NO:1951: (Length of Sequence = 336 Nucleotides)

CTATCTCCCC AAATCTACGT TTCACCATTT GTACTGTTAT TTTTFTAGCC CAAGCCACCT TTATGTCACT CCTGGAACAT
 AATAACTGCT TTCTCACTCA TCTCCTACAT TTINACCTCT TATAATACAG TCCACCTGT ACOGAGCAAC AAGAGTTATC
 TTTCTGAAAT GCATATTAGA TCATGTCACA TCTCTACTTG AAGCTCTCTA AAGATTCTC ACTAAAAGCG AAGTCTAAAA
 TTTCCACCA GACCTATAAG GNCCTTAAAT GATCTTACCT CTCTACCTAC CTCINOGATC TTACCTATCT TCAACCTOGG
 TTCTATTTTC TATATC

SEQ ID NO:1952: (Length of Sequence = 413 Nucleotides)

CAGTATGTA TTTAATCAGC AAATGCCCA TTCCATCTC TACCGGAAAG CTTTCAGACG CATTCOCAGA TCAGACAGAG
 GACTAGGGTT AAGGCTGGGA ATGAACACC AGCTAGTATC CCAGTGAGCT TTCCCAACA CACATACACA GCAAGTCAGA
 CTAAACAACG TCCAACTGAA GACTCACCTC AAATACTTAG ACCTAAGATT CACGTCCAGG CTCCTTCAGA TACACCAGGT
 AAGTAAGCAC TTGGCATTCC TATCTCAGCC ATTCACCTCA CAGAATCTTT TGGGTGCCTA CTGTGTGCCC AATACTGTGC
 TTAGTGGTAC TTGCCCTCAG CAGGAAAAA AATTAAAAGT GTTAAATGTT ATGAAGGAAC AGATTGGNAT AGGAATCACA
 AGGCATTGAG GTC

SEQ ID NO:1953: (Length of Sequence = 382 Nucleotides)

GTTTCACTCT TGTTGCCAG GCTAGAAATGC AGTGGCGATC TTGGCTCACT GTAACTCTG CCTCCCGGGT TCAAGTGATT
 CTCTGCTC AGCCTCCCTA GTAGCTGGGA CTATAGGTGC ATGCTGCCAC ACCCAGCTAA TTTTFTGTGA TTTTGTAGT
 AGACAGGGTT TCGACATATT GGCCAGGCTG GTCTGAACT CCTGATCTCA AGTGATCTGC CCACCTAGGT CTCCCAAAGT
 GCTGGGATTG CTGGCTGAG CCACCGCACC CTGCCTAGAA CATGCTTTIN AATAGTGTCT CTAACCATCA TGTTTAGGGC

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ACCCTAAATA TATGGTACCT CAACAAATAA CTTAAAGATT TCCGTGTGGC GTGAACCATT TCAATTTGAA CTAATATCCT
TGAAAAAAT CACATTATTA CAAGTTTTAA TAAATACAGT AGAGAGCTGG CATTTTCTA AATACTGGAT TTCAGATCTG
G

SEQ ID NO:1943: (Length of Sequence = 351 Nucleotides)

CAACTCAGGT TAGCAACTGC AGGAAAACCT TCTTCATTTT CACTGAATTT TAAAGAGAGA ATCCTGTCTC TATTTCTCAG
AGAACTTAG GTGAAAAGTA AAAGAGAGGC AAAATCTCTT TCCTTCATGA GATACTTTTA TTTTATCTC TTTCTCTACT
CATGTGCTTA ACTGGTGAAA TGATTCTGTA GAAATAGATC CTTCTGATTC TGCATCTCAT TTCCTTATGG CAACTACAAC
AGGAGGAATC CAGCTGGAAA TGCCACTAAC CCCACATCCA GCACCTGAGA GAGGAAGCCA GTGGGAGCGC CGTGCTGGGC
TCACTCACTC TGGCCTGCGC ACTGGGGTTG T

SEQ ID NO:1944: (Length of Sequence = 406 Nucleotides)

GCCCAGGCTG TCTCAGAATC TTGATGGGGT GGTCAATTGAG CTCCTCTTCC GCCAGAGCAA GATCAGTGAA GTCCTGGGAG
GCAGTGGCTA CAACTCGGAC CGGCTCTGCC TGGCCTACAT TCCTCAGCTG ACAGATGAGG ATCGTTTATC CAAGAGGAGG
AGCAITGGAG AGAACATCTT CCTTGAGGAT CCCGAGGATG GTCTGGTGAA GACCAACATG GAGAAGCTGA CCTTCTATGC
CCTCTTAGCT TCAGAAAAAC TTGATCGTAT TGGCGCCTAC CTCCTTGAGA GGCTCATCCG TGACGTGGGT CGNCATCGAT
ATGGGTACGT GTGCATTGCT ATGGAGGCTT TGGACCAGCT GCTCATGGCC TGCCACTGCC AGAGCATCAA CCTCTTCGTG
GAGAGC

SEQ ID NO:1945: (Length of Sequence = 362 Nucleotides)

TCAATTTGTG AAATTNAGAA TTCTGCTATG ACAAGTGGAA AATTGAGAAA AGACGCAGAG CCACTTTTTG TNATCGTGTA
GGTGACAAGG AGTCTCCCAA GTATATCCTG CTAATAGGAG TAGCTCTCAA AAGTTAATCT CAATAAAGCC TCCTAAAGTC
TCTGGCAAAG AAAACTGCTG CAATCCCTTG TGCAATTCTC CAGACTAAGC TGTATGGGGG AAGCCTACCT TTTTTCAGCC
CGAAGTTCAG GAGACTGAGG ATGTAAGTGG GGACATGATC ATTGNTTCAA AGGTGATTGC TTAAGTATCT TAAAAATGTA
TAGAGCTAAT CTGAGTACCG CTAAATTCA AGAGCCGTGG CT

SEQ ID NO:1946: (Length of Sequence = 408 Nucleotides)

AACCTCINAC CCCAGGTTT AAGCAGTCCT CCCACCTCAG CCTCCCGGGT AACTGTTCTT TGTAACCTCTC TCATCATCGA
GGCTATATAT TAATAGACAT GGTATTAAGC CCACACGAAA CATTGAGAAT TAGAATTGGA TTAAGAAGAC GCGTTTTGGC
ATCACGCTGA CTACTCCTCA TCTCCGTCCT CGGGGAGGGT GATGCCAGCG TGGGACTCTT TGGGAAGGCCT ATCAATCACA
GGTGCCCTAA AATCAAAAGG TGGGTCAGTA GGTAGGGAG GGNGGCGCGA AAGGAGATGC CAGCGGGTGT TAAGAAGGAT
ATGGTCAGAA GAGCTCTTTG TCTCCATCCA CGGGGCCCTCT GCTCAGCCCG TGTTGTCTCG GTGAGTAATT CGGGAGCAGT
GCACGGCT

SEQ ID NO:1947: (Length of Sequence = 426 Nucleotides)

CCATTTGACA CTGTTACTAT CTGCAACAGT TCTTGCACTA GAGGATGCAC TTCAAAGTGC ACTGCTTTAC TGCTCACTG
GAATTCATAA AATCTAAGCT TTATCTTTTT AACATTAAGC TGTGTGGGAA TGTAGCAACC TCCTGGGTGG TGGGGTGGGG
GGCATCTTCA ATTATTTAGG TCTCACTGGA AAGTTTGAGA TCAGAGTTTG GTAGGTGGTG TAAGGGGACA ATGAGTAAGG
GAGAGAAAAT ACAGGACTGA CTTGGGGCAA AAAACGCCCTG ATAATAATTT GTGAAGCACA TTTTCAAACCT CATTTATTCC
TTACAAGGAT CCTAAGAGGC GGGTATTATG TCCNGGTTAT ACCTGGAGGC TTAAATTGAA GGAACATCTN CAAGGGCACA
CAGTTTAATG AATGGCTGAG GTAGGA

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SEQ ID NO:1937: (Length of Sequence = 393 Nucleotides)

TCACCTCTGT CACCCAGGCT AGAATGCAAT GGCACAATCT CGGCTCACTG CAACCTCCGC CTCCCAGGTT CAAGTGATTTC
 TCCTGTCTCA GCGCCCCAAG TAGCTGGGAT TACAAGCACT TACCATCAGC CCCAGCTAAT TTTTGTATTT TTAGTAGAGA
 TGGGGTTTCA CCAATGTTGGC CAGGCTAGTC TCAAATCCTT GACCAGGGT GATCCACTCA CCTCGGCCTC CCAAAGTGCT
 GGAATTACAG GGTGAGCAC GCGCCCCAGC CTGINTTTCA TGTTAGATCA TAATATGATC TCACCAGATC CTTACTGAAA
 ATGTACCTTA TTACAAGTAG CTAAATTTCC ACATAGAGGG NTAAAAAGAT TGGGGAATCA GGTATGACT TTT

SEQ ID NO:1938: (Length of Sequence = 407 Nucleotides)

GGCCTCCCTG TCGGGTGCAA TGCACTGGCT CAGATCATAG CTCCTGCAG TCTCGAACTC CTGAGCTCAG GCAGTCTACC
 TACCTCANCC TCCCAAAGTG CTGGGATTAC AGGCGTGAGC ACCGCGCCCA GCCAGAACAT CTGTTTTTAC ACCCAGAGAG
 CGCCCTCGT TAGGACAGAA CCAAGGTGCC CAGAGCCAGG AAGCCGCCCT CCTGGCGCCC AGCATCTGAG CTTCTACACG
 TGATGGGCGG GCTCAGGAGA GGACAGGGAG TGTGGTGA AGTTCCACAG CTGGCGCGT GGGGGGGCCC TTGCACCGCA
 CTTGCGCCT CTGACTGCC CGATCCCG CAGCCCTGT GCGGATGC ATTTYCCTCC TTTCTYCCAG GGTACTGGCC
 CCAGCAA

SEQ ID NO:1939: (Length of Sequence = 412 Nucleotides)

GACATGCCAC CACCCAGTT AATTTTTTGT ATTTTCAGTA GAGATGGGT CTCACGATGC TGTCTGGGT GGTCTGAAC
 TCCTGAGCTC AGGTGATCCA CACTTGGCC TACCAAAGTG CTGGGATTAC AGGCGTGAGC ACCGCGCCG GCTAAAAGAA
 AGGAGATTCT AATGCATGCT ACAACACCGA TGAACCTTGA GGACATGAGC TTACGTGAAA TAAGCCAGGA ACAAAAGACG
 AAGGCTATAT GAATCCACTC ATATGAAGTA CCTCGATTAG CCAAATCCAT ACAGAAAGTA GAACAGTGGT TGCGCGGGG
 AGGGGGAAAT GGAAAGCCTA TATTTAATGA GTCCAGAAGC TTTTTTTTGG TTTTGTPTT TAGACGGAGT CTGCTCTCTG
 TTGCCCAGGC TT

SEQ ID NO:1940: (Length of Sequence = 421 Nucleotides)

ATCCATCCCC TTGCCAGGG CTCACATGC CGGCTCCCC CAACCGGTCC TTCCCCTGG GCTGCGGTG CAGCTGTGGG
 CCCAGGCTTT GGCGGCCCA GCTCAAGAC AGTGGGACAC AGAAAACACT TTGCAGCATC GCCTCTCCCT CGGCCACAC
 CAGGTACGA GAGATGGGC CCCACCGAG AGATCACAGC TCTGGTACAG GGAGGTGGC AGGGTTGGAG AGGAATGGAG
 AGACATGTCA CCTCTATAGA AACGCTCCA AAGTACAAGC TAAGCAGGGG GAAGGAGGAG GGCCAGAGAG CAGCGGAAA
 GAAGAAAAGA GGAACACGGC AGGGGTTCT KGGGGAGGAG GGCTCACAM CACCCCGCAG ATGAGCGTCT TCACCAAGAA
 GGTGTTCTTC GAAGTKGCGG T

SEQ ID NO:1941: (Length of Sequence = 377 Nucleotides)

GTCAGCTCTA GAGGCACCT GCATCATGCC CACCAGGGTG ATCCCCCTGG GATNGACCAT CTCGGGATAT GAGGCCTCGG
 AGGCTGGGGT TGAGATTGG TCCTGAAGAG CTTATAGCCA GATTGCCACA TTCAAGTGTA AGTCCAGGAA AGGGGCAGGC
 GGCAGTGCAC AGGGATTAT CAGTCCAGA ACCTCACAGT GATAAGAGGC TTTAGAGAGC ATCTAATCGA GACCTTTAAT
 TTTTCGGGGA GAGCAGCTGA GGCGTGTGG AAAATTAGTG GAGAGCTGAC AAGTGTCTTG GCTCCTGGCC CAGGGGTCCG
 TGGTCCANCA CGTTGTGTT CAGTTGAAG CAAAGGGCTT GCCGTGATT ACCTTCC

SEQ ID NO:1942: (Length of Sequence = 401 Nucleotides)

TGAGAACATT AAGAAGGACA ACAAATTAA ACATTCTTTA ATAAAATTCC TATAGAAAGC TCAGTCATAG GGCAAATACT
 CATTTCCTT TCCCATATCA CCGAGGATTG AGAGCTCCCA ATATCTTTG GAGAATAAGC AGTAGTTTTG CTGGATGTG
 CCAGGACTCA GAGAGATCAC CCATTACAC ATTCAAACCA GTAGTTCTTA TTGCACATAT TAACATTACT TGCCCCTAGC

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CACTACGGCG GCGTGGTCAG CCTCATCCCC CTCATCCTAG ACTTAATGAA AGAATGGWTC GCCCACTTCG AGAAGTTGCC
GCGCAAGGTG CTGCAGGGCA CGCGGGCTGC CTGCACT

SEQ ID NO:1931: (Length of Sequence = 343 Nucleotides)

ATCACTTCCC CACCCACAG GATCTGCCCC AGAGAAAGTC CTCGCTCGTC ACCAGCAAGC TTGCGGGTGG CCAAGTTGAA
TGATGCTGCC CGGGGCTCTG CCAGATCCTG AGACGCTTCC CCTCCCTGCC CCACCCGGGT CCTGTGCTGG NTCTGCCCC
TTCTGCTTT TGCAGCCAGG GGTGAGGAGG TGGCTCGGGT GTGGGCTGGA GAGGCAGAAG CCTTTTCTG TTGGTGTCCC
AGCATATGGA GCCCCTTGGG CTGAGCACCA AGACCTTGAA CCTTTTTTGT TTTACCTTTT TTCCAAATAA CAGTTTGGAG
AAATATCAAT GAAATCTGGG GGT

SEQ ID NO:1932: (Length of Sequence = 314 Nucleotides)

TTTCATGGGT TTTGTGTTG TTTATTTGGA ATACTGAAAA AGTCCTTTGG GCTCTGTGGG GTTCCCCACG CTCACGGCTC
CTTTCTCCA CACTCACTGC CCTTCTTCCC ACAGCAAATC TATTTCAAGG ACAGTACTTT TTAATAATGAT TAATGTTGAG
TTCTCAACTA GCTCTGCAGA ACTAGAGGAG CTGTTTGCAT CTGTCTGTGC GGATGGAGTT TCTTTTATCT GACACCAGGT
CTCCAACCAC ACTGATGCAA GGCATTTTAT CTACAGAGCT CAACTAGAAC CCTTTTTC TTAGGCTACT CCAA

SEQ ID NO:1933: (Length of Sequence = 378 Nucleotides)

AGCTTCTGCG GGGACCACAG CTATGTGACT GAAGCTGACA TCATCTCTAC CGTIGAGTTC AACCACACGG GAGAGCTGCT
GGCCACAGGT GACAAGGGCG GCCGGGTCGT CATCTTCAG CGGAACACAG AGAGTAAAAA TGCGCCCCAC AGCCAGGGCG
AATACGACGT GTACAGCACT TTCCAGAGCC ACGAGCOGGA GTTIGACTAT CTCAAGAGCC TGGAGATAGA GGAGAAGATC
AACAAGATCA AGTGGCTCCC ACAGCAGAAC GCGGCCACT CACTCTGTG CCACCAACGA TAAACTATC AAATTATGGA
AGATTACCGA ACGAGATAAA AGGCCCGAAG GATACAACCT GAAGGATGAA GAGGGGAA

SEQ ID NO:1934: (Length of Sequence = 239 Nucleotides)

ATTTAAATTG ACAGCCTTCC ATTTTTCGAG AAAGTACAAA CAGAACTGCT TTAGCACCCA TCGAGCCCCA AACGGGTAAG
GTAAGCCAAG GTTTTAATGA CCAGCCAGT ATCTAAGCTT CCAAACGGAT GCCAGCCAT CACATACTYA CCTTGGGAGG
CTGCTGCACG GGCATTCTCC YGATGCTCAC GGCCTTGGK GTAGGTTTCA RGATCGCCTC TTTAGGAAG GACTTCAGG

SEQ ID NO:1935: (Length of Sequence = 319 Nucleotides)

TTAATTTTTT TTTCCCATAG AGGAATAGCA TTACAGTCTA ACAATCAGAA TTCTGTTACA CACATACACA GGCATGCCAC
ATGACCCAGT TGAGGTGGT GINTCCTTGA GTCTGTGAC ACGTCACATG GTCAAAGTCT CCTCATTTCA GCCAGTCTCA
ACACAAAACA CCCAACAGG ATGCACTCAA CTGTGTGGT CCATGTGGAA CTAGGTGGCA GGGCGAGAGG GAAAGTAGTA
GAAGGGGGCT ATGGTGTGTC TGCAATTCAGT CCOCTCACAT AAAGCCACAT GGATCTAGGG GGGGTATCCA AGAGCTCTG

SEQ ID NO:1936: (Length of Sequence = 415 Nucleotides)

CTATTTTAC AAATTATACC TAATGAGTAA AATTAGTGA AAGTGATAAC ATGCTCTAC CTGTATTTCT AGTGACCCCT
TAGCGGCAGG TATTTATACC TGGTATTTAT GATGCAGTAT ATAAGTGGTG AACATAACT GACAGTATG TGCTGTCTGT
ACATGTCTGG TCTTTGAAA CAGATTTAG TAAGCATTTT CCAGAGGTAA AACTGTGTCC TTATCTAAT TTTATCTTA
GGGCAAAGTA GACAGGGAAT ATTTCTTGA ATCTATTTCC AAATTAATAT TTTTTCITT GGTATTTCTA CACTTTAAGG
CCATTTGGTG CAATTTAGAA AGTGTGGCC TCCCTTCCG TAGCCACATT CAAAATTAAC TTCCAAAACC TCAGGAACAG
TACAAGGAAT TTGAA

GTGAGTTGGG AGCTGTGATG GATCTGTTGG CGGGTTTGG ATGTGTAAAG AATGATATAT ATA

SEQ ID NO:1924: (Length of Sequence = 231 Nucleotides)

GTCTCTCCCTG ATTCTCAACC TTTCGAACCT GCCTTCGGTC ACTGCTAGGT CCACGTAGGC TTAACCTTGA TCTTATATGT
AGGACCGGTC TTCACCTTAA GCAAGAGAAA TGTAAGAAGT GNTTTCOCOA CTCAGTTGCT GGCCCGAGCTT TGGCCTCGTG
TTCCCTTTCT GAGGACTGAC CTTTGGTATT GCTCTGGAGT CTCATATCCC CTTTGGCCCT AACTGACCAC G

SEQ ID NO:1925: (Length of Sequence = 249 Nucleotides)

GTTTTTACTT AACCATTTCTA TTGTGGGAA TTGGGTTTCC ACTTTTTTNT TATAGATAGT GGTGCAGTGA ACATTTTAA
ATAGCTTTTT NCTTCAGTGT AATTATTTCC NTAGAGAAAG TTACCAAGAG TGGTTTTACT AGTTCAGAGG GCTTCAGGAT
TTTATGGCT CTNCTAGCG GTGCTCTATT ATCCTTNAGA AGACTTGTAT TACTTCCAGT GTCAAGAAGG TTGCNCTTCC
ATGGAATGG

SEQ ID NO:1926: (Length of Sequence = 367 Nucleotides)

TTTTTCTCAG CAAGGAACAG TCATGAGAAA GAGAATGCGT TCCTAGGGGG AGGTCTCTAA AATGGCCACT CTGGGACTGT
CTGTCTTATA TGGTTGTGGA TAAGGGATGA AATAAACCCC GGTCCTCCCT AGCGCTCCCA GGCTATTAG GACGAGGAAA
TTCCCGCTA GTAAATTTA GTGAGACTGG TTGTCTGTTT TCAAACCTTG TCTCCTGATA AGATGTTATC GATGACAATG
CATGCCGAA ACCTCATTAG CAATTTTAAAT TTCGCCCCGT GCTCTGCCAT TTGCCCTGTG ATATTTTATT GCCTTGTGAA
GTATGTGATC TCTGTGACCA CAACCTATTC GTACANITCC TCCCTT

SEQ ID NO:1927: (Length of Sequence = 231 Nucleotides)

CTTTTATTGG GGGCGGATAC CGCAAGGGCC CGCCACGGT CAGGTTAGTG TTCTGCTCTT GCAGAGGCGC KACAGCCTGA
CACCTCCACC TGCCACCCGC CGGGGGTAG TGAACATGC AAAGCTCAGA GGGTGGAGGC AGGGGTGGTC GCTGCTGAGA
CCAGGGCTGN GTGCAACAGG AGGGTCAGCA CAGAGCCTGG CTGGTGTCCC TGGGCCCAA GGGGGCTGGG G

SEQ ID NO:1928: (Length of Sequence = 283 Nucleotides)

CCCCTTGCTT CCCCTGAGCC CAGGTATGTA ATTCTACAC ACACTGATG AGCTGTINTG TGTGTGTATA TGTGTGTGTG
TGTGTGINTT AATGTGACAT GCATGTACTG ATCNGAGAA GCCTTTATAC CAAGAATAGA GCTGGGATCT CAAGCCACCC
CTCCAAGAT CAGACAGCAG AGTGAACAG GAGGCCAGA CAGGCCTTGT GTCARATGGC AGACGNTGCA GCAGGAAGCA
GAACCAAGGG ACGGGGRNCA TGGGATGCTA TKGCCAGCCA GCT

SEQ ID NO:1929: (Length of Sequence = 287 Nucleotides)

CTAGGAAGTA GGGAGAGAAT TTAATAAGTA AGGAGAGAAA GGAAAAAGAA CAAACATGGA ATATGNTCAA GCAAATAACT
TCCAACAGAA ACAAGANGAT ATGTTTTAAA ATATATTTCC CCTGCCAAT AGTAAACTT ATTTAGGCA CAATGCATTA
CTGAGGTGAA ATTAAAGTGA CATAAAATTG AAAACATCAC ACTGGANAAC ATTTATGGG GCTCAACTGA AGGTGGCATA
GTCCAGGAAG GCATTTGGAC ATGTATGGGG TGTTTTCTTG TTGCCCC

SEQ ID NO:1930: (Length of Sequence = 357 Nucleotides)

ATGGAACACT ACTGCAACAG CTCCACAGAC CGCGGGGTC TGCTCATGTT CCTGGACATC TGTTCAGAGC TGAATAAGCT
CTGCCAGCAC TTGAGGGCCG TGCACTCTGG CACCCAGTC ACCAACAACC TCCTGGAGAA ATGCAAAACC CTCGTTAGCC
AAAGCAACGA CTTAAGCAGC CTCAGAGCAA AATACCTCA TGATGTGGTG AACCACCTCA GCTGTACGA GGCCCGGAAC

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GGGACCAGCA AGGGCTTGGN GTTGAAGGG GTGGCTCAAG GAAGCCTCTT TCTCCACTCA CA

SEQ ID NO:1917: (Length of Sequence = 375 Nucleotides)

GAGATTAAAA TAAACAACAC AAAATGTATT TAAATGAGAA ATTGAAATAT TAAAAATAAT ATTAGGTGAC ATTAAACTG
TCATAGAAAT AAACGTGTATA TACAACAAAT AAATCAATGA TTGTTAACTT TTTTAGACAG TTTGAATATC AGATTATAAT
GAATAGCAAT ATTAGCCAGT AAAAAGAGCA TATAAATTAT TTTAAAATTC CAAATAAAAA TATTTAAAAT TTTGAAATTT
TGGACCCAAA ATTATGTCAG TAATTTTCATG AAAGTAGATC TCCAATAGGT CCTATATTCT AGACACTATG AAATGACATC
AGAAACCGTC AATTAAAGTG TACCCACAA GTGATAACTA GCTACCATAC AAGTT

SEQ ID NO:1918: (Length of Sequence = 315 Nucleotides)

AATATACAGT ATGATACACT GATGTGCAGA ATGTGATTAG TTTATTAATC ATATGTGAAA ATATTAGTAG CTACATATGG
CCAGAATAGA TTTTCTCTC TACAAATGTA AGTTAGTGT GATAGAATTT GTTATGCGAT ATTTGGTTCT TTGGTTTCAG
TCTCAATGCT TTCTTCTTGG CATTTCAATG ACTCTGTAAA TTAACCTCAG CATCAATTTT CTTTAAAT CAACAGTTAT
TCAAATTGAT CGGAAATTAA ACTTGTATGT AGCTAGTTAT CACTTTGGGG GTACACTTTA ATTGACGGGG TTCTG

SEQ ID NO:1919: (Length of Sequence = 285 Nucleotides)

CAGAAGTAAA AGATTTTTAT TGTTCTATAG ACACCTCTGA AAAGAGATCT AATTGAGAAA ATATACAAAG CATTTAAGAG
TTTCATCCCC AGAGACTGAC TGAAGGCGTT ACAGCCCTCC TCTCCAAGGC TCAGGGCTGA GAACGGTTAG CATATCGAAT
GATCAGTAAA AACATGCAAA AGTNGAAGG AAAGGGAAAA AGGTGCATTC CCTAAGCTG AGGGGGNTGG AATTTAGAA
CAGAGGWWGC AGGGTGGACA AGTACCAGGT GGCTCTCCCT TTCCC

SEQ ID NO:1920: (Length of Sequence = 181 Nucleotides)

GCAGGTTTAT TTTTATTAT ATGTATTINA ACTGACTTAT TTKTGTATCC CACTAGAACA ATACATTAC AATATACTTG
CAGAACTKTG CCTGGSGCAT CAGGGGAGCA GAGAACTTTT CCAGTGAATA GTTTTGAAG AAAGGAGTAA AATCTCCCC
AAACCCTAAA GGCATCCTTT T

SEQ ID NO:1921: (Length of Sequence = 351 Nucleotides)

AGACGGGGTC TCACTCTKTC GCCAGGCTG GAGTGCAGTG GCGCAATCTC AGCTCACCGC AACCTCCGCC TCCCAGGTTA
AAACGACTCT MATGCCTCAG GCTCCGAGC AGCTGGGACC ACAGGCACAT GCCATCATGC CCGGCCAACC TTCTGTACTT
TTWAGTAGAG ACGGGTTTTT ACTGTGCCAC ACAGGCTGGT CCCGAATCC CGACCTCAGG CGATCAGCTR CCTCAGCCTC
TCAAAGTGCT GGGATCACAG ACGTAAACCA CCATGCGGGG CCCAGTCTT TTCTTCAGAG GGCTCCTNAG CACCCCAAC
CCCAAACCTG AGGCCTGTGA GAGTCTATCC G

SEQ ID NO:1922: (Length of Sequence = 198 Nucleotides)

CCTCATCTGG ACACAGATGA TTTGCCAAAG AAGCGGCTG CCCAGATCTG CAAACCTTGC AACCCAGCAC TCTGTCATAT
CTCGCTTAGC GTGTCCACAA CTGGGATGCT AGCTGGCGTA AAGATGCTCA CGCAGCCACC AGTGCCCTCTG CCGTCCATAA
GTGCAGTGTG ACTTACCTTC TGAGAGTGGC ATCTGCTG

SEQ ID NO:1923: (Length of Sequence = 303 Nucleotides)

TTGATTTGCC TATGGTGTGA AATCCTTGT TATTTTCTA AAAAAATAAA ATTTAAAAAG AAAGAAAACT AAGGAAGAAC
AAGANGCTAT TTACCCAAAG TGAGCTINCA GTTTTAGTTT TGCATGGCTG TTTGACTGCC TTTCGCCCT ATGAAATCA
AGAAAATCTT TTTTAAAAAT GGAGTCTGTC TATTTTCCAC TCCTTGCGA TAATACAAAT TCAGTTTGTG AGGTTGGATG

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AATGCACCCA TTTGGCTGCC AAGAGCTTCT CACTGCCTTG CTAGCAGCCT GCCACTGTNC CCTGGCAAAT TGAAACCACC
 CACGCAAACA CTCAAAACCC CAATCTCCTT GCTAATAAGA TACAACAGT TAACACCGTG AAAAATGCAC ATCTCCAGCC
 TTCATTTCAA AAAAGAGCTC TGTACTAAAT GCAATATGCT TTTAAAGGGG GTTTTACAGG GACCAATCTC AATGCAAAGA
 CCACTACCAG ATGTCAGT TTTGGTTACA GGTTTATAAT TAGACACAAA ATTCACCTCA CACTGGAGTT TTACTTTCAA
 GCTGGAGTTA GCATTAGTTC TA

SEQ ID NO:1912: (Length of Sequence = 380 Nucleotides)

TCATGCTTTT AATACAACT TAAAAAATC TGAACAATA GAAACTGTAC AGATTTGATC AATCTTTTTG TTTTGTTTTT
 AAATAAAAT CTCTAAACAC ACCAATGTCC CATTOCAAAA TATTGCACAA CATTCTGAAT ACAAACCCCT TGATTGTATT
 CCTCCNCAC TAAAGAAAAA AGTTCATGAC CCTGCTCCCC GGGCTCCTCT CCAGGCTTGC CTCAATGCCC CCTTCCCATC
 CCTAGGGAGA AAATAAGAGA ATCTATAACT CACTGCATTG AGAAAAACAC ATCATTCTGG ACTAACAGTT TTCCATTCTT
 CAGANGGNTA ATCCACCTTT TGGATTGTGT CCTGGGGAAA GAGGGGTAGA TAGAGGGATG

SEQ ID NO:1913: (Length of Sequence = 361 Nucleotides)

GAGACAGAGT TTTGCTCGTT GCCCAGGCTG GAGTGCAATG GCGTGATCTC AGCTCACCAC AACCTCCACC TCCGGGGTTC
 AAGCCATTCT CTGCTCCG ACTCCCGAGT AGCTGAGATT ACAGGCATGT GCCACCAGC CCAGCTAAGG CTTTGTATTT
 TNAGCAGAGA TGGGGTTTCA CCATGTTGGC CCGGCTGGTC TCAAACCTCT GACATCACAT GATCCCCCG NCTCAGCCTC
 CCCAAGTGCT GGGATTACG GTGTGAGCCA CTGCCCTGGG CTCTCCAGTA CATTTTATAG GGGACGATCA ATGAGGATTC
 TCTTCTCTGA GTTACTGCAT GTGTACAGT TTATAATCT T

SEQ ID NO:1914: (Length of Sequence = 409 Nucleotides)

GGGGCCCTTA CAACTAGGTA TGGTGGATAT TGCCCGACAG ACGGTGGAAT TTCTCTACGA AGAGAATGGT GGCATCCCAA
 GAGACCTTTA TCTTCCCACC ATGAAGACA TTAAAGACGA AGCAACAAG TTCACAATTG ATAAAGTTG AAAAGGTCTC
 ACAGTAGTAA CCGCTCTCC AGACAGCAAT AATGTAGCCA GCAGTGCTGT TGGAACTGCT CTGCCAAAAT TTGCCATCCG
 AGGGATGCTG AAAACCTTTG GCCTTCATGG AGTCGTCTTA GATGTTGATT CAGTGAATGA ACTGGTGCAG GTAGAAAGT
 ACCTCCGCGAG TGAAGGTGTG CTGGTGGAT ACTTGGTATC CTATTTGACA TGTGTGGAAA GGGCCCCCAG CAGGCTACCG
 AARGGACTT

SEQ ID NO:1915: (Length of Sequence = 402 Nucleotides)

ATGGTTTATA GCAGGAATAC TTGTTCTGAA TGACTTGGAG GGAAAGTGTG TGTGTATATG TGTGTGTGTG TGTTTGTTAG
 TTTTGTGAG GTAGGGGAGA CTATTTTGT GGTTCAGTCA CTCCAATTAT TGCCACAATG CACTTTCCTT CATAACTGCC
 CCACCAAAGG TCTTAAAAGC CATTTTGGGA GCCTATGCA CTGTGTCTC CTACTGCAA TATTTTCATA TGGGAGGATG
 GTTTCTCTT CATGTAAGTC CTGGAATTG ATTCTAAGGT GATGTCTTA GCCTTTAAT TCCTGTCAA TTTTGTGGT
 CTCCCCTTCT GCCATCTTAA ATGGTAAGCT GAAACCTGG NCTACTGTGG CTCTAGGGG TAAGCCCAA AGGCCAAAA
 AA

SEQ ID NO:1916: (Length of Sequence = 382 Nucleotides)

GAAATGAGAC TTTATTCTGA AATTATTAAA AAGAACAGAG ATGCTCCATT TGGCTGCATG CAGGGGGGGC GGTGGGGGG
 ACAGAGGGGA GGACAGGGG TCAGCCAGG GGACCGTGT TCTTTCCAC GCAGGACACT GTGCATGGG CTCTGGGTGC
 ATCTGCCCAT CTGTCTATGG GCCTGTGTGT GTGTAGAGG CCAAACACAG AGAGCTCCGT GGGTCTGTGT GTATCCAAGT
 GCTAAAAGGC AGGCTGGCTT TCTGGGGCCC ACAGCTGGG GGCTAGTATC CTGGAAGGTT TCACTTGGT GCTTGGCCTA

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CCAGTCCTGG TGCCCAAGTTC TNACANCTGC CCTCCTGAG TTCACACTGG AGTCCTTGCA GTCTGAAAC CACAAGGCCT
 NCCTGAACCC TGGGTCAGGA GAGAAANACT TGGGGAGGGG AAAGGACGGC GTGGGCTACC CATKACGGCT CTGAGTTCTT
 CCTGGGGCTT GTGTCTTTTC CTGGGCAGAA GAGGGCACAG CCAAAGGCAA

SEQ ID NO:1906: (Length of Sequence = 415 Nucleotides)

GTCACACCTT CATTCAGTGA GGAAGAAATG CTTCACCTCT GGAATTCAC AGCATCCCAA TCTGACGTTG TACCCGTTG
 ACACGTGTTG TGAGCCCCAA GTTTCACGA GCTCTTGCAA GTAAACGGAC ATTGTCACA TTGTAGACA GCTGTCTTC
 CAGATAAGTG GATGTTTTCT ATGTGACGAG AGATGCTACG TCGATGCATG GTGAGGAAAG GACAAAAGGG GCACTGGAAC
 CTATTCATGA ATCTNCTAAA TGAATCCCC TTGGTCTCCA ATAATTGTT GCCATCTGAG CCCATCAGCT GCTCTGCAGA
 CAGGCTGAT GTCTGGTGAT CCACAGCACT TAAACCAITC TCACITGTCT ATTTCAITTA ACTCTTCATC AGAACTAGAG
 TCATTAGCAT GCTGT

SEQ ID NO:1907: (Length of Sequence = 214 Nucleotides)

TGAAATCTG TACGTGTCAA CTTTGAAATG TATGTGTGT GGTGGGTGG TGGTGATG ATACGGTTTG GATGTCTGTC
 CCTCCAAAT CTCATGTGA ACTATAATCC CCAATGTTCC AGTTGACGTG GTGTTTGGTT CCATGGCGGG GTACCCTAGG
 GATTCACTG TTTCTTCAC TTCCCTTTC ATCTGAGATC CTGCTGAAA CCAC

SEQ ID NO:1908: (Length of Sequence = 410 Nucleotides)

CAGGAGAGCT GGGCACATGT CCAAGCCTG TNAGTGGCCC TCCCTGGTGC ACTGTCCCG AAACCCCTGC TTGGGAAGGG
 AAGCTGTGG GTGGGCTAGG ACTGACCTT GTGGTGTGTT TTTGGGTGGT GGCTGGAAAC AGCCCTCTCC CACGTGGCAG
 AGGCTCAGCC TGCTCCCTT CCTGGAGCG GCAGGGCGTG ACGGCCACAG GTCTGCCCG CTGCACGTTG TGCCAAGGTG
 GTGGTGGCG GCGGGTAGGG GTGTGGGGC CGTCTTCTC CTGTTCTTT CTTTCACCC TAGCTGACT GGAAGCAGAA
 AATGACCAA TCAGTATTTT TTTTAATGAA ATATTATTGC TGGAGGCGTN CCAGGCAAAG CCTGGCTGTA GTAGCGAGTG
 ATCTGCGGG

SEQ ID NO:1909: (Length of Sequence = 339 Nucleotides)

AAAATTAAAT CCAAATTTTA TTAAGGATTT CAGGTACAT ACTTCAAATT TCTAGAATGG AATGGAATCA TTTTGGAACT
 GGAAAAATGG CATAAACA CTGCTCCCT AAAACTTCAA TTTTATAAAG AAAATTCTTC TGCAAACCAC ATCCCTTTTA
 TGTAACAAGA CTAGGTATTA TCTACACCT CACTTTGGCA ATAGCTATTT CCTAAAGAAT GAAAAAGATG ATTTTNTTAC
 TTCAGTTCAT TAAAAATGGG ATTCTATCT TGAAGTTCAG AAAAAGCTGC ATTTGATGA ACTATGGGTT AAAAAAAAAA
 GCACATAGTG TCTAATCAA

SEQ ID NO:1910: (Length of Sequence = 439 Nucleotides)

GGCCCAAGGA GCACCAATCA CAGCAGGGC TCTGGCCAG GTGTGGGCG CCCAGGCCTC CATTGCTAA TGATTAATAC
 ACTGTTTGGG CTGGCCAGTT TTTTCATGCAT GCAGCTTGAC GATTGAGCAC AGTCAGGCCT TTGTATTAAA AATGAAAAAT
 GAAAAACAA ATTCAAACC TATTCAAATG GGTCTAGTT CAATTGTGTT AGTATAAAT GTCATAGCTG GTTTACTGAA
 AACAAACACA TTTAAATTTG GTTACCTCA GGATGACGTG CAGAAAAATG GGTGAAGGAT AAACCGTTGA GACGTGGCCC
 CACTGGTAGG ATGGTCTCT TGTACTTCGT GTGCTCCGAC CCATGGTGAC GATGACACAC CCTGGTGGGC ATGCCGTTG
 ATGTTGGTT AGCGTGTCT GCATTGTCTA GGAGTGAAC

SEQ ID NO:1911: (Length of Sequence = 342 Nucleotides)

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ACTTYYTTATT GTTAGCACAA CATTACCAGA AAACGKTAAC GGCAGCCAAG CAGGACAGAC AGTTAAG

SEQ ID NO:1900: (Length of Sequence = 405 Nucleotides)

GGGATGCACT GGGTTTCACA TCAAGTTCIT GAGAGGWTCC CGAACGACTT CTCTGCCCCA GGGGAGTCCG AGCCACAGTT
TTCGTATCAA CTGATGATTC TRACCCGCTT CTTTCTCTCT GGGGGGTAAG ACACITGTGTG TTGAGCTCTG GGGATGATGG
AGAACGACTC CTCGGCCTAG GAGTCTGAGG CAAAGCTTTC GGTTCGCGG AAGAATCACA TTGCTTCTC CCTCTAGATG
GCGTCTTAGG TATATCTTTC ATTCCAGGAG AGGACCCAGA CAGGCTGTGC CTCGAGGGAG TOCCAGACCC ATCTCTAAGT
CCTGGAGAAG ACCCAGACCT GCTTCTCCTT GATGGAGTTC TGGTAAACCA TCITTCATTT CAGGAGAAGA TGCAGACTAC
TTCIT

SEQ ID NO:1901: (Length of Sequence = 244 Nucleotides)

ATRATTCAFA TGCTAGTTTA TTTATCTTAT TATTGAGAGA TAATTTCAAG ATGACAGTTA TCAATAATCA ATTACAATAT
CAAGAAATTC AAAGAACAAA ATCTTGCGA GACTATGCTT TTGTATTTGG ATTTAAAAAG TATGTGATCT CATTITCACA
TACCAAGCTG AGAGGCCATT TAGACTATCT CTTTGCTAAT TTTTGCTTAC TGCTGTAGGG AAGAAGATTT CCAATGAMCT
TTAG

SEQ ID NO:1902: (Length of Sequence = 329 Nucleotides)

TAAAAATAAA AAAATAAATA AAATTTTAAA AATAATAAAA ATTCACTATA TACACATATA AAGAAATAAA AAGAAGTCTC
AGTTGCAGCT ATTTGTCAAA ATTAATATCC ATTTCTWTTW ATATACGGTG AATATTGCGC AATTATAGAT CTGGATTTTA
AACCACITAA TGAAGCGGCA ACACCAGGTG TTTTAAGGTG TTGGCATTCT TCGCTGATTT GCGTGTCC CAAATGTTTACA
TTATTTAATC TTGCAAAAAT GGTCTGATG CACTTGGGAT GTGAAATGCT GTCCCGTTTT ATTTTTTTAA TGTGTGTATC
CTTGGGTGT

SEQ ID NO:1903: (Length of Sequence = 421 Nucleotides)

ATTTTATATT CCACAGTCAG GTGGGTCTGC GATASTCATT TAATGTTAAA CGCCATCAGG GGCTCTCCT CCGTTTCTG
CCAGGGGCTT TTCTGTCTT CTCTTGGTC ATCATCATCA TCGTCTCCT CTCTCTGTG GGCAGATCTT CTCTGGTGGG
GGCTGGCTGC TGGCTCCGAG GGGGCATCCG CAGTCCGTCT GGTGTCTCC TCCTGCAGGC TGGGCAGCTG GCCACCACTT
CTCGACTCG ACCCTCCAA CAAGCATCGC AGGGCACTGT CCTCGGGGT ACAGACCGTG GTCCCAATT CGCTACCACT
CTGTCCACG NCATCCAGGG TACACGAGCT GCGTGTAGGC CGTCTGTCT TGGGCTCGA GGTCTTTCT GCTGGTCTC
TTGGACGGGC GGGTAAATTC T

SEQ ID NO:1904: (Length of Sequence = 423 Nucleotides)

GTCGTGCGC CTGTCTGAA GTGACGGTGC AGCCAGGCTG CTCCTGCCC AGCAACCCG AAGCCATTGT GCTGGACGTC
GACTACAAGT NTGGGACCCC GATGCAGAGT GCTGCAAAAG CCCCATATCT GGCCAAGTTC AAGGTGAAGC GATGTGGAGT
TAGTGAACIT GAAAAAGAAG GTCTGCGGTG CCGCTCAGAC TCTGAGGATG AGTGCAGCAC GCAGGAGGCC GACGGCAGAA
GATCTCCTGG CAGGCAGCCA TCFTCAAAC GGGAGACGAC TTCGGCAGG ACATGCTGGC CCTGCAGATC ATCGACCTCT
TTCAAGAACA TCTTCAGCT TGTCGGCCTG GACCTCTTTG TTTTCCCTA CCGGTGGTG GCCACTGCCC CTGGGTTCGG
GGTGATCGAG TGCATCCCG ACT

SEQ ID NO:1905: (Length of Sequence = 370 Nucleotides)

CAGAACGAGA ACATTTTTAC TCTTGGGCT CTGGGAAGG CCAGGCAGAG TGCAAGGTGT CCACAGGAGG GGTAAGCAGA
GAGGAGCTAC AGGGGGCTGC AGTCTAGTA CCTGTGGG GAGGACTGAG GGATGGTGAG TTTGCTCTCC GGAGGGGGCT

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CCAGATAGAG TTTCTGTTTT TNAGTTTTAC ACGTGCCACA TCAGGGAAAG TTAGGTTATG ATTAAAGCAA GAGATGATAG
 ATGAACAAAC AAAGAAACAA CAACAAAAG CCCATGCAAG AGGCAGGAAA AGAGGCTGAC TGGTTAAAGA ACAGGCCAGA
 TTGGACAATA CTGATCAAGA GGGGTTTACA TTGAAAGAA CAGTGCTTTA TTCCTCTACT GACTAGAACT AAAGGGATTT
 TGGCCGGGTA CGGTGGCTCA CACCTGTAAT CCCAACACTC TGGGAAGCCA AGGTGGGCGG GTCACGAGGT CAGGAGTTTG
 AGACCGCCT NACCAACATG GGTGAAACCC CATCTCTACC CAAAATACAA AAACTTTINC CGAGCGTGGG CCCGGCGTTG
 GTTGGCTCAT ACATTTNATN CCCCNCCTTT NGGGGGCCCA NCCGGGCGGT TCACCTTAGG GTCAAAGG GTCCGGGNCCT
 TCTTGGC

SEQ ID NO:1894: (Length of Sequence = 283 Nucleotides)

GGTGGTGAAG TGGGCTCTGG AGAAGCTGGA GCTGACCAAG TACGAGACA AGCCGGCTGG CACCTACAGC GGCGGCAACA
 AGCGGAAGCT CTCCACGGCC ATCGCCCTCA TTGGGTACCC AGCCTTCATC TTCCTGGACG AGCCACACAG AGGCATGGAC
 CCCAAGGCCC GGCGCTTCCT CTGGAACCTC ATCCTCGACC TCATCAAGAC AGGGCGTICA GTGGTGCTGA CATCACACAG
 CATGGAGGAG TCGAGGCGC TGTGCACGCG GCTGGCCATC ATG

SEQ ID NO:1895: (Length of Sequence = 234 Nucleotides)

ATGTCCATTA GCCTCATTG TCATCTGAGG GAGCTGGTGA GAACAGCCTT GGCGTGAAGG CATCCCTGGT AGAAGTCGGG
 GGAGATAGAT AGTCACAGT CCCGAGTTGG TGGAAATNGG ATNGGAGTAG GGAGAGGCTN GAACAGACCC TTCCCCATTG
 ACCTGNGAA TTTCTCTC CCCTGCCCCT AAACACTTTA TTCCATCAC AGGGGAGAAA TNCCTGCTGAG AAGG

SEQ ID NO:1896: (Length of Sequence = 285 Nucleotides)

CTTTAAAGTG TAATAATATG ATTTTATAA AGAAATTTAT TACTGTGTC AAAGGCTTTT TTAAACCACT TTAGATTCA
 AGAAAAATA AATGGAAATC ATCGAAAATT CATTTCACAT TAATGGTCTA AAAATAAACC AAAGGACATT ATGTGTGCAT
 GTGTGTATAA GTGCACACAG AAATATATAT NCATATGNG ACTATATACA TGTGTGTATA TATGTGTATA TATACATNCA
 CTTGTATAAA TGTATATACA CATATACCTA TAATGTGTGT ATGTG

SEQ ID NO:1897: (Length of Sequence = 288 Nucleotides)

GCAGGTTTAT GTTTTTATTT ATGTATTINA ACTGACTTAT TTGTGTATCC CACTAGAACA ATACATTCAC AATATACTTG
 CAGAACTGTG CCTGGSGSAT CATGGGAGCA GAGAACTTGT CCAGTGAATA GTTGTGAAG AAAGGAGTAA AAWCTCCCCC
 AAACCCTAAA GGCATCCTTT TCGTAGTGTG TGTCCTAYAG GTATGGCTGC TGAGCACCAG GGGCTGCTCA CCAATGTCCTC
 AAGAAGCAGA GTCANGGAGG CAGACAGCAG GGTATTATTAA GGTGCACA

SEQ ID NO:1898: (Length of Sequence = 398 Nucleotides)

CAGAAGTAAA AGATTTTTAT TGTTCATAG ACACCTCIGA AAAGAGATCT AATTGAGAAA ATATACAAAG CATTTAAGAG
 TTTTCATCCCC AGAGACTGAC TGAAGGCGTT ACAGCCCTCC TCTCCAAGGC TCAGGGCTGA GAACGGTTAG CATATCGAAT
 GATCAGTAAA AACATGCAAA AGTGAGAAGG AAAGGGAAAA AGGTGCATTC CCTAAGCTG AGGGGGATGG AATTTAGAAA
 CAGAGGAGGC AGGGTGACA AGTACCAGGT GGCTCTCCCT TTCCCTCTGT GTTATCTTTC AAAACAGTTC CAAGCTTTGA
 GAAAGCAATG AGCTCCACCT ACTCAGCAGA CCCACGGGTC GTCCCCCTGG ACGTGACTTA GCAGTGACCT TGCCTGCC

SEQ ID NO:1899: (Length of Sequence = 227 Nucleotides)

CATGGGGACC CGGTTTTATT TTATTAGGAA GGAACAACC AAGCACCCCA TGTTCCTGCC CGGMACTCCC GGGGGGAACA
 TGCCAAAMAG CCGGGGATCG AACCCAGCCC ACCTGTCTGT GRGGKCCCTT CCTTCTCAGG CCACAGAAAT AAACCCGTGT

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CATCGGCATA GTATTTACAT CATGGGTATA GGCAAGINCT ACAAATCAGG NCTTINCCTT GGGGATGGAT GTTTGGAGCT
AGTTTACCAG CACACCAAGT GGTAAAAGTG AACAAATACT TTTTGTATCC CACAGAATCT TAAAAAATAC TTTACTTCGA
AAATGTCTCT ACTAAGTAAT CATATATATA TATATATNTG TATATATA

SEQ ID NO:1887: (Length of Sequence = 332 Nucleotides)

CTCGTTCACT GCCCGCCAAC TCCCATTCCA ACTTCCTTTT TACACTGGAT GTTCTCTATCA CATCTGAGG ACCACTAACC
CACCAGCAAG TCCTCCCTG ACACACATTC ACGTAGGTCC ATACCCCTCA GAGTCCTAAA GGGTTAATGA GAAGCCACCT
CAGCTTTGGT GAATGGAGCC CCAGCCCCAA ATCCCCTCCC CTGCAAATA TGGGACAAGT AGGGAGAGTC TGATGGAGGC
ACCAGGACAA CTACAACAAC CTCTTACCCC TCAGCTATAG ACACCTAGAT CAGGACAGAG GGATGCATAT GCCCTCTCCA
CCTTAACACC AA

SEQ ID NO:1888: (Length of Sequence = 224 Nucleotides)

AAGAGCTGAT TGAGGCTGCC AAGAGGAACG ACTTCTGTAA GCTCCAGGAG CTGCACCGAG CTGGGGGCGA CCTCATGCAC
CGAGACGAGC AGAGTCGCAC GCTCCTGCAC CACGCAGTCA GCACTGGCAG CAAGGATGTG GTCGGCTACC TGCTGGACCA
CGCCCCCCA GAGATCCTTG ATGCGGTGGA GGAAAACGGG GAGACCTGTT TNCACCAAGC AGCG

SEQ ID NO:1889: (Length of Sequence = 261 Nucleotides)

CACITTTACTG AGTCACACCC AGCTGTAAAC ATGTCACCGT GAGANTCCCG CCCCCACCC CCAGGCCGCA CAGTCOGGA
TGAAATGACA GGGGAGCGGG GAGGGTCGCC GGAGCGGGTG CCAAGCAAGG CAGGGCAGGC AAGTCGACGA GGCGCTGAGT
TTCCGGGAGG AAGCCCGGAG GAGGTGGGGT GGGCAGGAG CGNGGGCTGG GGACCGGCC GAAGACCAGG GGGCCAGGA
AGCCTCTTTT CGAAGGNC T

SEQ ID NO:1890: (Length of Sequence = 312 Nucleotides)

CTGCGAGACT ACGAGACGGT GGTCAAGGTG AAGCCCCATG ACAAGGATGC CAAAATGAAA TACCAGGAGT GCAACAAGAT
CGTGAAGCAG AAGGCCCTTG AGCGGGCCAT CGCGGGCGAC GAGCAACAGC GCTCCGTGTT GGACTCGCTG GACATCGAGA
GCATGACCAT TGAGGATGAG TACAGCGGAC CCAAGCTTGA AGACGGCAAA GTGACAATCA GTTTCATGAA GGAGCTCATG
CAGTGGTACA AGNCCAGAA GAAACTGCAC CGGAAATGTG CCTACCAGAC AGAGAAGATT ACAGTATGTG GG

SEQ ID NO:1891: (Length of Sequence = 298 Nucleotides)

CCTAAAGGCC AGGCAAGGCT GATTCTCCAC TTCCACATGA GACAGAGCTG ATTCTGCAGG GAAACGGCTG GGGAGGCTCC
ACCTCTTTCC TCCCCACAAC CATTTACTGG GAAGTGTGT ATACTTGGCA GTNIGGGAGG AAGGTACTTG GAAGACCCTG
CCAGCCATCT CCCACCCAGA CTCTTCTCA CCAGCACAGT CTTCAAGGCT TGGTGGGAAA GGTGTGTGGG AGTGGAGAAA
GACAAAGGGC CCTTCTTNA GAGAGGAGCT GCAGAGAGGG GCAAAGGGT TCCTAGCC

SEQ ID NO:1892: (Length of Sequence = 333 Nucleotides)

CTCCAAGGTC ATCCAGTCCG TCGCTAATTA TGCAAGGGT GACCTGGACA TATCTTACAT CACATCCAGA ATTGCAGTGA
TGTCATTCCC AGCAGAAGGT GTGGAGTCAG CGCTCAAAAA CAACATCGAA GATTGCGGTT GTTCTGGAC TCCAAGCACC
CAGGGCACTA TGCCGTCTAC AACCTGTCCC CGAGGACCTA CCGGCCCTCC AGGTTCACCA ACCGGGTCTC CGAGTGTGGC
TGGGCAGCAC GCGGGGCCCC ACACCTGCAC ACCCTGTACA ACATCTGCAG GAACATGCAC GNTTGGCTGC GGCAGGACCA
CAAGAAGGTC TTC

SEQ ID NO:1893: (Length of Sequence = 487 Nucleotides)

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GAAAAACAAG GAAANTAGGC AACAACTGC AATGGACACT TTTCTCTACA GAACCTTTTC AACCTGAAT TGAATTGTTT
CCTATTCAAT TNCATAAAA AAGTACTTT GCAAGATATA AGGAAATACT GTCCCAAAGA TTTTCACTAG TCATTCAATC
CATTAAATAGG ATTTGAAAAG GCATCATTAC ACAGGGTTGA AAATACTCTG GAATGAGACT GCITTACAGT CAGAATGCCT
GAGTTTGTAG GCACTGTAC TTCTAAACAT CTCTAAGTTT CTATTNCTC ATCTAAAGGA GTAATATTAC TTTCCTTAAA
AGGTTG

SEQ ID NO:1879: (Length of Sequence = 222 Nucleotides)

GAAAGGGAGA GGTTGCAGCG AGCCAAGATC GTGCCACTGC ACTCCCACTT GGGTGACAGG GCAAGACTCC ATCTTAAAAA
AGAAAACCCA GGAGTCTTTG GTTAATGTAG TGCAGGACTC TGAGCTCCCG GGAGGACCTT TCCCTCCAG ATGAACTGTG
ATGGACCAGC CCAAGGAGG GGAGAGAGCA CTNNGGCCAT AGTGGTGGTG GATCTTTCTA AC

SEQ ID NO:1880: (Length of Sequence = 244 Nucleotides)

GACATGAATG GTATCTCTCT GGGGTATGAG ATCCGCTACT GGAAAGCTGG GGACAAAGAA GCAGCTGCGG ACCGAGTGAG
GACAGCAGGG CTGGACACCA GTGCCCGAGT CAGCGGCCTG CATCCCAACA CCAAGTACCA TGTGACCGTG AGGGCCTACA
ACCNGGCTGG CACTNNGCCT GCCAGCCTT CTGCCAACGN CAGGACCATG TAAGCCCCCT CCGCGGCGAC CTCTGGGCA
ACAT

SEQ ID NO:1881: (Length of Sequence = 156 Nucleotides)

GTACAGGGGA GAGTTGAGCT GTGACAAAGT CAAACACAGG CCTTGGCCAC CCACAGGAGC TCTGCAGCTG GGGTGGTCTT
GAAAGTTGTC TCAGTGAAG CAAGGTGCTG AGCTTATTAC CCCAGCAGTC ATTGTATTTA GGCTCCGTGT GGTACC

SEQ ID NO:1882: (Length of Sequence = 210 Nucleotides)

TTTTTTTGA AACGAAGTCT CAGTCTGTCA CCCAGGCTGG AGTGCAGTGG CACGATCCCG GCTCACTGCA ACCTCTGINT
CCCAGGCTCA AGCTAGTCTC CTGCCTCAGC TGCCCGAGCA GACGGGACTA CAGGCACCCC CACCACGCCC GGCCAATCTC
CAAATGGTTC TTTTTTCCG GAGTAGTAAG TTACAATATG GGAGATTATT

SEQ ID NO:1883: (Length of Sequence = 214 Nucleotides)

GTGATGAATA CATCCAGTTT TCCAACCACA TTCCACCAGG TGGGTGTTTG GCTGTGGGAC GCATTATGTA ATCTTCGTTG
CCAGGAAATT TACCTTCCTA ATTACATTTT GCAAATGTTT ATTTGAAGCC GCCTTCTTGG AGCTCACAGT AACTAGGAGG
TGGCTGCTGG AAGCCCCAGG GCACCGTGG AGGGACAGGG GAACGTCCA GACC

SEQ ID NO:1884: (Length of Sequence = 211 Nucleotides)

ATCTTTCGCT CTATGTGCCA TCACCTGGAC ACTCTAGGTA ATACCCCTTG TTGGGCAGGG GTGAGCTCCC AAGGCCTCAG
GCAACCCAGC TCCCATGACT TTGCTGGGCT CAGCCACAT AACTGTCTC ACAGGATAGA GTGTACACT GGTGCTTACA
GCTTTCCTGG GCCAGTGTG CATGCTGCCA GTGGCTGCAG CAGCAGCCCC A

SEQ ID NO:1885: (Length of Sequence = 212 Nucleotides)

ATTAGCTGAA TTGCGGTGTG GCGGTTTGGG TAGGCAAAGG AGACATCTTG GAACTGGACA AGGCCCTCCA AGTGTAAAGG
AGTCAACAGA CCACTGGGTG GGCAGCGAGG GGTGCGGTCC AGGTACTCAA ATATTTTCTC TGAGGAGCCC ACAGCCTTCT
GTACTCTGGG GTAGATGGAG AGCAGTACCT CCACAGCCTG GGTGAACCTG AT

SEQ ID NO:1886: (Length of Sequence = 208 Nucleotides)

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CAGCTGCCTC TCGCCTTTG CACACACAGT CCTTGGCACA CTTCTCACAC TNCGCAGGCA GCAGGAGCAG CAGCTCTTCT
TGCAGGAGGT GCATTTGCAT CCTCGCACT TGCAGGAG

SEQ ID NO:1872: (Length of Sequence = 271 Nucleotides)

CTTGCCATCT TCACAGCCAG AAGCTTCCTT GCTTCATGCG CAGACCTCG TGAATCCCCT TCCCTTATAA GGGCCCCCAT
GATTACTCAG GGCCACCTC AACCATCCAC GGTCACTCC CCACCAAGAA ATCTGAACT GAAGCACAGG CGCGGGTCC
CTTTTGCCAC GCAAGGTAAC ACTTTCCAC GTCTGGGGT TCCAAACCTG CACATCTCTG GGGGCTGTTA TTNCACCCAC
CGTCATCAGT GAGGCGCCTT NAGGAGGGG T

SEQ ID NO:1873: (Length of Sequence = 332 Nucleotides)

CAGGGTATAG TGCAGTGGCG CAATCTCGGC CCACCACAGT CTCGACCTCA TGGGCTCAAG TGATCCTCCC ACCTCAGCCT
CCCAAGTAGC TGGGACTACA GGCATCCTCC ACCATGCCCA GCCAATTTTT TCATTTTTC ATAGAGAAGG GGCTTCACCA
TGCTGCCCAG ACTGGTCTCG AACTCCTGGG CTCAAGCCAT GGAATTGCCT TGGCCTCCCA AAGTGTTAGG ATCAGAGCCG
CGAGCCCCTG GACCGGCCT ATAGTTTTTG TTTCGCTTG TTTTGTGTTT TTGAGATGGA GTCTCACCT GTCANCCAGA
TGGGAGTGCA GC

SEQ ID NO:1874: (Length of Sequence = 317 Nucleotides)

CTCTCCACCT CAACCTCCAG CCCACCTCCA GGCTGGGGAA GGGGCTGAGT CTTCCTCTCC CATAATACC TCACCCGGCC
CCCAGCCAC AGAGAGGCTG AGGGAGGGG TCTGGGTCTT CCTCCATCCC TGTACCTGCT TCTTCCCTCT TCATTTCAC
CTCTAGATC TTTCCCCCA CCCAGCCAC CTCCAGGCTG GGAAGGTTA GGAATTCCTT CCTCCACAC CTTACCCAC
CTACCTGCA GCCTGTGCC TGGGCCAGGA GAGGCATGGG TGAACAACA GACCCACAAC CCCGACCT GCAGGCT

SEQ ID NO:1875: (Length of Sequence = 185 Nucleotides)

GTGTTCCACC CACCTCGGCC TCCCAAAGTG CTGGGATTCC TGGCGTGAGC ACGCTGCGCC TGGACAGTCT GCCCTAGAT
GAGTTGCCA GCAAGGTACA GCTACTGCCT GCGCGACCC CAGCCCTGA TTCTACCGC GCTCGGCAGG GGGACGGCA
GGGAGAGGTC CAGCGCGCG GCAAG

SEQ ID NO:1876: (Length of Sequence = 214 Nucleotides)

CCTGGGGACA AAATAGTCAG CAAATCTCA AGGGGAGAAA ATAAAGTACT TCCCTTCTGT TAAAAAAG TCAAGAGACA
AATCTTCTT CCCCCATTCT CACTAATAGT TATTGAAGG GAAAAAACA AACCCACAA CTTTTTAAAC TAAAGATAAA
AACAAATGAA AATGAATAAG ATCCAAAGAA TGTCTTTGT TACTCTGCCT TATG

SEQ ID NO:1877: (Length of Sequence = 340 Nucleotides)

TTTGAAGAAG AAGAAGTTGA ATTTATCAGT GTGCTGTCC CAGAGTTGC AGATAGTGAT CCTGCCAACA TTGTTATGA
CTTTAACAAG AAACCTACAG CTTATTAGA TCTAACCTG GNTAAGTGCT ATGTGATCCC TCTGAACACT TCCATTGTTA
TGCCACCCAG AAACCTACTG GAGTACTTA TTAACATCAA GGCTGGAACC TATTTGCCCT AGTCCTATCT GATTCATGAG
CACATGGTTA TTACTGATCG CATTGAAAAC ATTGATCACC TGGGTTTCTT TATTTATCGA CTGTGTCATG ACAAGGAAAC
TTACAACTG CAACGGGAGG

SEQ ID NO:1878: (Length of Sequence = 326 Nucleotides)

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CATTTCTGTT ACATTGAGAC TTCAGTCACC AACATCTGGT GGCAGAGATA CAGGTGTATG AACATTTCT ATTTACCCAA
 ATATGCCAGT TCCCAAATAG GATGACTGCA TTTAGTGTTA AACTGGCTTT TCTCATTAGA TACTCTAATT GAGGAATATT
 TAGCTTCTTG AATAGAAACC ATCCAAATGA TGTTTTTTTT TTGATATGTC TGTAACTATA AAAATCAGCA AATAAG

SEQ ID NO:1866: (Length of Sequence = 424 Nucleotides)

TACGGGAAGG CGGTGTTTGG AGGCTGGAGC CGTGGCAACG TCATTGAGAA AATGCTCACA GACCGGCGGT CTACAGACCT
 TAATGAGAGC CGCCGTGCAG ACGTCTTGC CTTCCTAAGC TCTGGCTTCA CTGACTTGGC AGAGATTGTN TCCCGGATTG
 AGCCCCCAC GAGCTATGTC TCTNATGGCT GTGCTGACGG AGAGGAGTCA GATTGTCTGA CAGAGTATGA GGAGGACGCC
 GGACCCGACT GCTCGAGGGA TGAAGGGGGG TNCCCCGAGG GCGCAACCA GCACTGCCTC CGAGATGGAG GAGGAGAAGT
 CGATTCTCCG GCAACGACGC TGTCTGCCCC AGGAGCCGCC CGGCTCAGCC ACAGATGCCT NAGGACCTCG ACAAGGGTCA
 CCCCTCCTCC ACCCTGGACT GGCT

SEQ ID NO:1867: (Length of Sequence = 256 Nucleotides)

AAACAATTGA AATCCACAAG AAATTACTAA CAGCACGTGT TTACGTTTTA TCCTGAATCA TACATTTTAA CAATTCACAG
 CTACAGGAAA TCTAGAACAA AATCAAATAT TCATCACGTT GGGTTGAAAA GTTGGAAGAT TTTGCATCTT ATTGAAAAGA
 ATTTTTCAAA AATGTTTCTG TACAAATGAA TGGAATTGCA CCAGGCTGCC CATGGACACC AGGTGTGGCC GCTTCCCAAC
 GGTCAACCCAC CAGCTT

SEQ ID NO:1868: (Length of Sequence = 297 Nucleotides)

CAAGGTTTTT TTTTATTTGT AGCTATAGCT ACAACTTGGC AGCATGGGGG AGGGTGGGAA TGTCTCTGGAG GGTCTCCAG
 CCTCCGCAA GCAGAGTACA AAGGCTGCTC GGGGGGCCGG CCGAGGGGCG GNTGTCAGCA GTGNAAGCAG CAGCACTAAA
 CCTGGTGCCC CCTCAGGTG GGGTGTCTGG AAGACGGTGG GCAATCCCTG CAGGATGGGC GAGGACCAGA CCCCAGGGCG
 GGGATCCTGC ATCCCTAGAC CATGTTGGGT CCTGGGTICAN GGCACCTINGG NATGCTA

SEQ ID NO:1869: (Length of Sequence = 470 Nucleotides)

CAGACATCTG GAGCATGGGA CTGTCTCTGG TAGAGATGGC GGTGTTGGAGG TATCCCATCC CTCCTCCAGA TGCCAAGGAG
 CTGGAGCTGA TGTGTTGGTG CCAGGTGGAA GGAGATGCGG CTGAGACCCC ACCCAGGCCA AGGACCCCCG GGAGGCCCTT
 TAGCTCATAC GGAATGGACA GCGACCTCC CATGGCAATT TTTGAGTTGT TGGATTACAT AGTCAACGAG CCTCCTCCAA
 ACTGCCAGT GGAGTNTTCA NCTGGAATT TCAAGATTTT NTGAATAAAT GCTTAATAAA AAACCCCCGC AGAGAGAGCA
 GNTTTTNAAG CACTCATGG TTCATGCTTT TTATCAAGGG GATCTNGATG CTGAGGAAGT NNGATTTTTT CAAGGTTGGN
 TCTGCTNCAC CATNGGGCTT TAACCAGNCC CGGNACAACC AACCCTAGGN TGNIGNGTIT TAAGNGTTTT

SEQ ID NO:1870: (Length of Sequence = 344 Nucleotides)

AGAGATTAGA TTTGTTAAAC ATCTAGGTTA AAATGGTTAA AAGGATTTTC ATACAATTTT AGGCACTATA CACGTTGTTT
 ACAACAGCAT TGGTACTTGG ATATGGGGAA AGATAAATCC GACATTTTAA TATCTTGATC AATTTGTGAC ATTCAAATA
 ATTCCATTTA AGAAACATTA ATCAAAACTT AAAGAGACAT ACCACTAAGT ATCCACACA GTATACTGAA AATAAATATA
 GNAATACAAC CAGAAGTCTA CAGNTACCA CAGTAGACAG ACTGGTGAAG NCCAGCTTTT TCATGGGCAG TNAAGGGCTC
 TGGGCTAGAT TTGGGTGTCA ACTG

SEQ ID NO:1871: (Length of Sequence = 278 Nucleotides)

GGATTTATTG TCATTCCTCC AAGGTCAGCA GGGGAAGGGG ACACCAGCCA CACTTCACCA CAGGCATAGG TGGCACTGAG
 CCACCTGGCA CTATCTCCAC GTGCTCCACA CGGAGGGGTG CCTTCTCACT GGCAGCAGCT GCACTTCTCT GCTTCTGCT

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TAAGACTTCC TGTTAGTAAA AGCTACCTCA TGAAAAGTAT TGATGTTATT TGCCAACATT TAGACTAGCT TTTGTTACCG
 TTTTCAGTTAT TCAATTTAGT CAGCACATGT TTGAGTGTCT TACTGCAGGT GAATAATCCA TGATTTCTGC CCCAGAGTAG
 TTCATAAGAC TGGTAGGATA CATAGATTTG TAAATAAATA ATTATAATTC TGGGCAGTAA GTGCTGCTAT AGAAGTCTCT
 ATAAAGCAAT GTGCAACAC AAGAAAAGGA GCCGTTAATT CCTTATAGGG AAAGG

SEQ ID NO:1859: (Length of Sequence = 326 Nucleotides)

CTTTATTTAG TGCTGGGGCT TTGGAAGCAA ATGTACCTGA GTTTGAATCT CAGGGATAAC CTTTGTACTG TGGCCCTGGG
 TAAGTTACTC ACTGTCTCTG AAACCTCAAG TTCTTCATAA ATAACCTAAG ATGGACAATC ATAACCTCTCT CTGGGATTGA
 GGTAGGAGAA TATGGTGGAG GCAGGGAACC GAAGGCCATT TCACTCCAAC TTCTTAGAAC TAAATTAAAA GGAAAACCCCT
 AATTTTCCAT GCCTAAGTAA CAAAAGGACC AAAGGTTACT CCGTTTGCAA ACTCCACCT TTTCTGCATG GCAGATGGGA
 AGTTGG

SEQ ID NO:1860: (Length of Sequence = 294 Nucleotides)

CCACCCCTAA AAGCACCTGG CCCCGCTACA GCAAAACCAGG TCTGTCCATG CGGCTGCTGG AATCAAAAAA AGGCCCTCTCC
 TTCTTTGCGT TTGAGCACAG TGAGGAGTAC CAGCAGGCTC AGCACAAGTT CCTGGTGGCC GTGGAGTCTA TGGAGCCGAA
 CAACATCGTG GTTCTGCTCC AGACGAGCCC TTACCAGTT GACTCACTCC TGCAGCTCAG CGATGCCTGC CGCTTTCAAG
 AGGATCAGGA GATGGCTCGA GACCTCGTAG AGAGAGCGCT GTACAGCATG GAAT

SEQ ID NO:1861: (Length of Sequence = 183 Nucleotides)

TGAAGACTCC TAATCTAGTG CCTCGAGAAA AGCAGGCAAC AGAGGCCCTGA TGCTGACAT TGAATCTTTG GAAGATTAAA
 CTCTCTACA GATTTCATA ATNACTTTGG AAATNATGAC TGATGCCAG GCTGTTCCCT GGGTGGACAG TTTGTCTTTT
 TTTTTTTTTT TTTTTTTTTT TTT

SEQ ID NO:1862: (Length of Sequence = 296 Nucleotides)

TTGGCTTCT TAAAGTCTC CCCATCCCTC CTAAGGTCTA AGATGATGCA TTAAACACAG AGGATGCCCA ACAGTGGCTG
 ATGGAATTAC CAAGTAAAT CTAAGAGGTA GAAAAATGTG GTAGTTTITA AATTTTATTT TATTAGTATG CAGGTGGGAT
 TCAGAGACGT AAGATCTTAG CCTTTATTTT CAACATCTCC CATGCATGTC AACAAAGATT ATCAACACA GGAAGTGAAT
 AAAATACTAT GTAGACACTG ACCCTCTTTA TATAAAATGT GATTGATCAG GTCTGG

SEQ ID NO:1863: (Length of Sequence = 259 Nucleotides)

CAAAACAAAA AGGGGCTCAA ACCAACAGGA AGTCAGCCCC ACCGCAAGCC GGAATACAAC TAACTCGTGC TCTCCAGCT
 CAGGCGTGA AGCCAAGGCT GTGCCAGGCC TGGCCAGGCC AAGCAGGATG ACAGCAAACG CATTCTGAAC GTTAGCAAT
 CAGGTCCCTT GTAATGTGCT TGGAGAGTNT GCACAAGGCC CGAGATGACG AGCTATGAGC TGTGGAAGGG AATGGGGGAA
 GCAGAAGGGC ACAAACAGA

SEQ ID NO:1864: (Length of Sequence = 290 Nucleotides)

ATCCTTACCA ACAATGCTTC CCAACTGCCT CAAAGCTCTC CTAAATGAGA ACATAGTTCT TTCTGAGCAA GGTCTGTGG
 ACCATGAAGA ATGTACCAA GCTCCCTCA GAGTCAGCG GAGCTCAGCC AAAGCACAAG TGCACTGCCC AGCTCTCCC
 ACTCTGACC TGCTGCTCA NACTCCCTAC GCTGAGCCCA GGCCCTTACC CTCTGAAGGT GTTTCCCATG TGATCTGAC
 ACACACACC CACAAGAACC AGATGATCTA TGNCATACAG CATTAGCTA

SEQ ID NO:1865: (Length of Sequence = 236 Nucleotides)

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CTGAGGGGCA TTTTITATTA TAAATTAAAT ATGGTTGATT AATGAAAAAT GACAATGAAG TACCAAGAAA ATGTTTGTC
ATATAAAAAT TTTAGCAGCA TTTCCATAGT TTCAGGCTCC AACATTAGTC GTACTTCCTC CCTCCCGCTA TCAAAAAAAG
AAGAGACTCC AATGGGATGG AGTAGAGCCT GGGGGTGTCC AGCTTTGTGT GGGCCTCAGA GAAATACTCC ATCCAGCATC
CAGGATTCTC CCTCCCTCTC ATCCCTGAAG TGCTAGAATG TCAAAGCACA GAAAAAGCCT CCTTTGTGCT GACATTGGAG
ACAAGGAT

SEQ ID NO:1852: (Length of Sequence = 174 Nucleotides)

GGGCAGGACG GCTCTNGGCC CTTCTGGCT GACTTCAACG GCTTCTCCCA CCTGGAGCTG AGAGGCCTGC ACACCTTTGC
ACGGGACCTG GGGGAGAAGA TGGNGCTGGA GGTTCGTGTT CCTGGCACGA GGGCCGAGCG GCTTCTGCT CTTACNAACG
GAGCAGTAAG GACG

SEQ ID NO:1853: (Length of Sequence = 252 Nucleotides)

GAGCCATGCA CACACACGGC CGCATAGTCA CACACGCATA TCTACATGTC CCCCCACAT ATACACACAC ACATATACAT
GGACCCATGC ACACACACAG CTGGATATTC ACACACACTT GCACATCCAC TCCATATACA TAGACACGCA CAGACACAGC
TGCATGTTCA CACACGNGGA CGTGACACG GACACAGACA TGCATGCATA TGCGCACAGG TGTGTACAGC CTCAGTGGTG
GGGTTGGCT GT

SEQ ID NO:1854: (Length of Sequence = 288 Nucleotides)

GGAAGGAGGG CTAAACAATG GTCTGCAGCT CAGTTACTCC TCATCTCGC CTGGGCGGG CCAGCATCCA CTCCCCTTCC
TGTAAGCAT TTGGATTTCC TTGGGAAAC AGCCCTGCCC TCTGTCTGA TCCATGTGTT TTGAGATCTC ACAGTAGCAA
GTGACTCATG TTGGTTCACT GATTCCAGA GGCTGATTCA AGGATGTCCC CAGCTAGACC CAGGATGGTG GACTCCAGAT
TGGGGCACTG GGCAGTTTCA CATCTCAAG GCTTGCCAT CATCGGG

SEQ ID NO:1855: (Length of Sequence = 293 Nucleotides)

AAAATGCTG TTGATATTTT AGTTATTAAT TCATATTAAC TTTGGCTGAA ACTTTTAAAT TCTATTGTGA ATAGTCAAGT
AAAATTTAGA TTGTTACATT CTGGGTTAGT ATTAGATTGT TTTTAAGATT GTTTTAAACA AGATGTTTTT AAGATGAGTT
TTAAATAGTT CTCITTAACAC AAATAAAGCT TAATATGAGT ATTTGAAGGA AATTATCCCA AACCATTCCA GTTCTGGCT
GTGAAAGGCT TTTCCAGGGC TAATAAGTTT TCCACTTCAG CCGTAAGTAG GTG

SEQ ID NO:1856: (Length of Sequence = 308 Nucleotides)

ATCTTAGCAG AATCTTGAAA AGCCCAGAGA TCCAAAGAGC CCTTCGAGCA CCACGCAAGA AGATCCATCG CAGAGTCCTA
AAGAAGAACC CACTGAAAAA CTTGAGAATC ATGTTGAAGC TAAACCCATA TGCAAAGACC ATGCGCCGGA ACACCATTC
TCGCCAGGCC AGGAATCACA AGCTCCGGT GGATAAGGCA GCTNCTGAG CAGCGGGCAC TTACAAGCCA AATCAGATGA
GAAGCGGGCG GTTCAGGCA AGAAGCCTGT GGTAGGTAAG AAAGGAAAGA AGGCTGCTGT TGGTGTGA

SEQ ID NO:1857: (Length of Sequence = 299 Nucleotides)

GGGGAAGCT AATTGCAAT AATCCTTGG GGAAGGTCAG ACTCCTCTCT TACAGATCTA GGAAGGCCT GGTAAATGA
TGGCTCTTTG GAAAATGCCA AGCTCCTTCA GATTCCATAC CCTCTCGGC CCTCAAGCAT AGGCAACGAA CTTGTCTCTG
GCTTCAGNT TTCTCATTGA ATCAAAGCTC TCATGCATGG CCTGGATTG TAAACACATG CTGGCTGCCA GCAGTGGCAA
GTTAGCCTCC TGACCCACTT CTCTCTGCT TCACTCTGG TGTATGAAG GGGATGAGG

SEQ ID NO:1858: (Length of Sequence = 295 Nucleotides)

SEQ ID NO:1845: (Length of Sequence = 441 Nucleotides)

GGGGAGGGGC GCACACACGA AGGGAGGTGT CAGCOGGGAC CGGAAATCCA ACACGGCRAA GGAAAAA CACRACCGT
TTCCCAAGG GAGGAGCAGC AGGAGACGAT GAAGAGAAGG AACAGAATC TCTGGGCAAT TCTGATGTAC ACCCAGGTAC
AGTGGGGATC TCTTCACTTG ATGCCCAAA AAAGGGATAA ACAAACAAA AACGTGAGCA GCCAGCTTCA TTCTCTTCTC
TGCTTTGTCT CTGCGCAGTG ACTTTGGGTT TTGTGTGAA GCTCTCTTAA TTCCTTGACC TTGAAGTTCC TCAACATCTA
TCCAGTAGC CTCAGTTTCC ACTTTGCTTC AACTAACATC TTGGACTTTT TTCAGTCTTG AACAGGCTA AACCTTTGAG
ATCTTGAAT CCGACTTCAG CCTACTTAGC TTGATACTAC C

SEQ ID NO:1846: (Length of Sequence = 255 Nucleotides)

ATGAATTCAT TGTTGATTTA TTATTCACAG TTAATCACTA CCTACCAAAT GCTATCCGCA GAGTTAAAGG ATTAAGTACA
TAGGTCTTTA TTAAACACT GATTTTMTT TTAAATATA TACACACAAA ACTTAGTTCA GCAAGGCTTC ATGATATACA
CCAATTCCAA AATAAAACAA TCAAATGGTC CNGGNGTAGA ATGCCAGATT CCTTTTATCA TCTGCGAGGA AAAGAGAAGC
AGGATGAGGA AGAGT

SEQ ID NO:1847: (Length of Sequence = 311 Nucleotides)

CAGGGCACAC GCAGGACCAC TGTTGGATTAG AAACCCAC: CTCACTCG CAACATTTCCT CCCACATCCA CATCCACGAC
GGAGCCAAAT CTCATTGTIN ACCCTCAGTC ACCACCCC: TATGGAGC CACTGGTTAC GNCATGGATG ACAGGTGTCA
TGACAGGGA GAGAAATTNT CCCCGGATAC CCTGAGG: TGGNCCAC CCCAGGCTA GGGTGGGAGG ATTTAGAGCA
GTGCAAGAAA CCAAGGAGGA TGGAGCATCC AAAGGAAG: AGGCAGGC TNGGGGATTG AGGGCAGGAA GGGCT

SEQ ID NO:1848: (Length of Sequence = 311 Nucleotides)

CCACTGGCCT ACATTATAGA AGTCTGTAT GCGGACCTG CCATTGTAT CATGGACGCA GGCCATGACC ATCATCACCA
CCCATTTTNT TGCTGAAGA GAATCCAAT GCTACCCAAC CATCTGTGTC TGCACTCAGC TCAAATTCTA CATCAGCCCC
TATCATCCGG TAGCTGAGGA AATAGTCACA GGCTCTGCA TTACAGCCTG GTTTGCCATA TCTAAAGCAT CCCTTAGTTT
TTCCACAGTC GTCCACTTG ATTTTGSCAA ATGGNTCCAC AGGAGAAGCA GCAGGGCTNN GTGTGGGGT T

SEQ ID NO:1849: (Length of Sequence = 318 Nucleotides)

GTGAGTCCCC CAAGAGGGGC CTCAGTCAG AATGTGATG ACCAGTGGGC ACAGGTGGAG TGAGTGCTTG ATGCCCATGG
TGAAAGCAGG GATGTGGGGC TTGTGCACAG TGANCTGCTG GACCTCGTGG GAGCCGGGGC CAGGCCGTGG CGTGAGGTCC
AGAGGGTAGG CGAAGGCTTG GGCATGCTGT AAGTAGGGCT GCGGTTCTNA TAGATGGATG GCTCAGGTGG GCGGTACGTG
GTAGGTCCAG GGCCTCCTGC CACATCCTCC TTGTAGANCC AGTTCTTGTG CCTGGAGGCC AGACTNTAGC AGGGAGCA

SEQ ID NO:1850: (Length of Sequence = 406 Nucleotides)

GGAAGCCACT GATTTTCCTT CAGTATGAT GATTACTTT AAAAATGAAC CCAGAGGGAC GGGCATGGTG GCTTATGCCT
CTAATCCAG CACTTCAGGA GGCTGAGGCA GGCAGATCAC CTGAGGTGAG GAGTTCGAGA CCAGCCTGGC CAATATGGTG
AAACGCTGT NICTACTGAA AATATAAAAA TTAGCOGGGT GTGGTGGTGT GCACCTGTAG TCCCAGCTAC TCAGGAGGCT
GAGGCAAGAG ACTCACTNAA CCTCTGTTGT GGAGGTGCGA ATGAGCCGAG ATTNCACCAC TGACTNCAGC TTGGGCAACA
GAGCAAAGAC TNCGTCTTCA AAAAAAATA ANAAGGGAAA AAAAACCNG NAAAAGCTTT TTTATGTGA AAAACAAGTG
GGTCAC

SEQ ID NO:1851: (Length of Sequence = 328 Nucleotides)

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GATGGAAACA AGTCCTGCTA TTTTCACAAT CCTAAGNGT TCTCCAGGCC TCTGGAGAAC AAAGTAAAGT TGTAAGATCC
 CCAAGACAC GGAAATCCT GGACGAACAG ATTAGAAATA ACTACAAAAA ACAAGTTTTT TACTTTTCGAA AAGGGTACTG
 CACTGAAACC AAGTTGGACT TTTGGTCCAC CCCCAGGGCC CTCTTCAGG

SEQ ID NO:1839: (Length of Sequence = 359 Nucleotides)

CNNGTAGGGA AGAGGACTTT ATTGGGATGT TAGTAGGGAA ACATGAGAGG GTGAATTCCA GGAATAGAC ACTAGGACCA
 AGGTGGCGGT CACCTTAAAG AGCCATAAAT AAACITAAAA AATTAAAGGTG AGGAGGTGCC ACGTGGGGAG GCTGCTGGGA
 CTATCTGGGA ATTCCTAGGG ATGGAATTTT GGAATTGGAA AGGGGAAATA AGAATTTCCA GCCGTNTCAC AAAAGGGTGT
 GAAATGATCA CTTCAAGACT CCTGCTGCC CTAGGCTGGG AGTTGGGGTT CTGGGGCTCC AGGAAGAGGG GAGGTCTGGG
 CTCGGCTTNA AGGGGTGAAG AGGGCCCGGT CAAGGTCGT

SEQ ID NO:1840: (Length of Sequence = 360 Nucleotides)

CCAATGAGCC CAGCCTGACA CATATGGACT GCTCGACAGG TCCACTGTCC CACGAGCAGA AGCTGTCACA AAGCTTGGAA
 ATTGCCCTGG CATCCACCCT TGGCTCTATG CCTCCTTCA CGGCACGGCT GACCAGGGGA CAGTCCAGC ACCTTGGCAC
 AAGAGGGAGC AACACTTCCT GGAGGCCCTG CACCGGCTCG GAGCAGCCTG GGAGCATCCT GGGCCCCGAA TGTCCTCCT
 GCAAAANAGT ATTTTNTCCC TACTTCAAAA AGGAGCCGGT GTACCAGCTG CCCTGCGGCC ACCTCCTGTG CCGNCCCTGC
 CTGGGTNAGA AGCAACGGTC CCTGCCCATG ACGTGCACAG

SEQ ID NO:1841: (Length of Sequence = 332 Nucleotides)

GTGTGATTCC ATTTATATGA AATGTCCAGA ACAGGGAAAA CCTATTINAG ACAACAGAGA CACAAAGTCG ATCAGCAGTT
 GCCAGGGGAG GAGGAAGACG GGAGGGGAAA TGATTGCTTC ACGGGGTGAT GACAGAATGT TCCAGAACGT GACAGAGGTG
 GTGCCATACAC AACTTTCTGG ATGTACTAAA TGCCGCTGAT TGTTCACTTT CAAGTGATTG ATTTTITAGGT TATTTGAATT
 TCATCTCAAT TAAAAAACCC AAACACGCAA ACTGCTCCCG CCAGCTTCAG CCCCAGAGCA GACGGCGCAN CGTGGGAGG
 GATGCTGAGC CA

SEQ ID NO:1842: (Length of Sequence = 246 Nucleotides)

GCTGGTCAAG GCAGAGTTTA CTGAACININ AGTTTCCTCC TGCACACACC GGGCATGACA CCTTCAAGTC TGNCCAGCAG
 TGGGTCCAGA AAGTACCCTG TGTGCCCTGG ACGCAGAGGC TACAGTTCTN ACTGTGTGGC ATGGGAGCCT TCANAGTGCC
 CTCGGGAGCT GCCCCTGGTC TTTGTCTGNA AAGGTGACTG GGAGGNTAGA AAAAGCAGCG GGCTGGCATT GTTTCGGGGG
 TGGGT

SEQ ID NO:1843: (Length of Sequence = 313 Nucleotides)

ATTTATGCA AACAAAATTG AGGTAAAAGA AGCTGACCCA GAACCCACGC CGTCCAGGC TGGGGAAGTC TCTACTCGCC
 CCACACCAGG CCCCAGCAC CGCGGGCCCG AAGCAGCCCC CAGAGGACAG ACGGGCCCTG CGCACTGAGG TAGCTGCATC
 TTAAGCCCC ATGAGTACAA CTGCCAGGG CTGCCAATT CCCAGAGGGG AGGAGGAGAG AGAGGCAGGC AGGGGGAGCC
 CCGGCTTCAG GTGGGGCACA CCCCANACCC TCAACAAACC TTCCAGCCTC TTCGGGCTGG GGCACCTCCT GCC

SEQ ID NO:1844: (Length of Sequence = 274 Nucleotides)

CTTCGCTTCT NAAAACCAA CTCCAGCCGC TGCCAGTCGG GACTTGGTGC CCGNCGCTG CCAGAATGCT CCACTGCCAG
 CCGCCCCCCC TGCTCGGTT TCCCTTCTGT TTAGTGGCGA CACAGGCACC CAGCTTTGGG GTGGTGCTGA CGCTCCAGG
 GGTGCCAGGA GCCACTGGGA CAGGGTGAGG CTCCAGACG CTCTCGAGG TGCCAGCTC TCCAGGGAGC TTCTGNNCCA
 AGGNGTCTG AGGGATCTGC TCCTTAACCN CCCA

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SEQ ID NO:1832: (Length of Sequence = 337 Nucleotides)

GTATTTGGAG ATGGGACCTT TGGAAATGCT TTGATTAGGA AGAAGGAGCT TTCATGAACG GGATTAGTGC CCTTATAAAA
 GAGGACGCAG AGAGCTCTCT CACACCTTCC ACTGTCTGAG GNCACAGGGA GAAGGCCCTG TCTATGAACC AGGNAATGAT
 CCCCACCAG AACACCTTGA TCTTGGACIN CCCAGATGCT CCANATCINT GAGAAGCAA TTTCTGTGCT TTATAAGCTA
 TCCAATGTAT GGAATTTTNG TACAGCAGCC CCAACAGACT AAGNTATTAA TAAAATAAAG ATGTAAGATC TCTGTTGAAA
 ATGCACAAAT AATATCT

SEQ ID NO:1833: (Length of Sequence = 244 Nucleotides)

TCTCTCATTTG TAAGCACAAA TTGTCCGTG TCTGGTTATT AAAATCGCTT TGGGTCTATA ACAGCCACTC TTGTCCCCC
 TTTTAATAGA AAATTTGTCAT TCTAGCCTGG ATTTCTCCCC ACTGGAGGTG GAGGGTGGGA AGAGAAGGGA GTCAGCTCTG
 ACAGCTTACA AACTGGAAG TTCTGTGCAT CTCCAGGGAT TCCAGAGTG AAGATCTGGT TGTGGAAGC TGGGCGCCCA
 GTGC

SEQ ID NO:1834: (Length of Sequence = 322 Nucleotides)

TCCTGTACTA CACCTTTGCC AACATGGCCA TGTGAACCA CCTGCGCAGG CCCCCGTCTT GCAGTACCTG TACTACCTGG
 CCCAGATCGG CATCGCCATG TCTCCGCTCA GCAACAACAG CCTCTTCTC AGCTATCACC GGAATCCGCT ACCGGAGTAC
 CTGTCCCGCG GCCTCATGGT CTCCCTGTCC ACTGATGATC CCTTGCAGTT CCACTTNACC AAGGAGCCCG TGATGGAGGA
 GTACAGCAIT GCCACCCAGG TGTGGAAGCT TCAGCTCTG CGATATGTGT GAGCTGGCCC GCAACAGNGT GTCATGAGC
 GG

SEQ ID NO:1835: (Length of Sequence = 178 Nucleotides)

ATGAAAGCAC AAAAGAAGTC TATCAAAATT ACAAAACTT AAAACCGAGT AAACAAACT TCAGAAAGAA TGAAAACAAT
 TGGAAAATAA CTCAAGAAA AAAATGTAAA ATGGAACAA TACAAGANCA ATTTGTGCCC TCTGAAAAAC AGAGGTTAAA
 GTCAGAATTT TTTGTINC

SEQ ID NO:1836: (Length of Sequence = 377 Nucleotides)

CGCCTGGNAC CACACCCAGC TAATTTTGT ACTGTTAGCA GAAACAGGGT TTCATCACGT TGGCCAGGCT GGTCTCGAAC
 TCCTGACCTC AAGTCACCCA CCTGCCTTGG CCTCCCAAAG TGCTGGGATT ACAGGCATGA GCCACTGTGC CCGGCCTTTA
 TGCTGAGTTT TAAGGGCTGT ATGAGACACC AGGTGGTGGG AGGGAGCTGT TTTGAGAGCA GGAATTTAG GATACTTAGG
 AAATTAGAAA ATTAGAGAAG TCATAGGATC TTGGAACATA GGGAGAACCT TAGAGTCCTG TGGAGCAGAA CCCAGCATTT
 GTATGTGGAG GAAACGGAGG GCCCAGAGAA GTTGTGACTT ATNCGGGGT CAATCTT

SEQ ID NO:1837: (Length of Sequence = 388 Nucleotides)

GGAGAGAACA AACCTCTTA CTGGCCTTGG GCCCATCCCT CTTTCTCCCA CACTGCTACT TTTGAGTTAT CTCATTTTGC
 TCCCAATAGT CAGCCTTGAC TTTCTGGGC TTACCTGGGC ATCAGGGACC CATGTTGCAC ATTCAATTGT CCGATTATG
 TCTGCCITAG AGGCTCTCT AGGGCAGCCA GTCTGGAACA GTCAGTCACC TAGGGTCTG GAGCTCCTGC AGTCTGCCAC
 TCGCTNCITC TGCTGTATAA CAAATACTAT TCTTTTATC CTTGCACTC GACCCAGAAA GAGGTGGCTG TCAATGTCCA
 AGGCCCTTGG GAAACGAAG ACTGGAAATN TGAACCACT GGGCACAGG GGAATGGGTG GTCTGAG

SEQ ID NO:1838: (Length of Sequence = 369 Nucleotides)

TCTCTTTATG CCAACAATTA ACTGGGAGCT AGGTAAATT ATTTGGCTAG ATAAACTAC CAGCTAGATG GATTIATTTG
 GTGCCCTCAT ACAGAATGCT GTAGAAAATG TAAAGAAGAG AAAGCTCCTT CCAGCTAGAA GCACATGGGA CTGCTTCTAG

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ATGAGAGGCA AATCTACCTT GAATGCACCT CCTCCTAGG CTGGGTGAGG TCACGCAGAC ACAGAAGGGC AGGACAGAAC
TCCCCATCTT CTGGGGGCCA ATTCGTCTGG AACTGTGCG GTCANCTTCC TTTTAAAGT GCCAGTATCG GTGGGGCAGG
AAGGGACTCT CAGGGCTGAG CAGAGCCTTC TTCAGCG

SEQ ID NO:1826: (Length of Sequence = 207 Nucleotides)

COGGCCCTT CAGTCCCCAG CCCCTGCCCC AACTCCGACT CCTGCACCCA GCCCGGCTTC AGCCCCGATT CCGACTCCCA
CCCCGGCACC AGCCCCCTGCC CCAGCTGCAG CCCAGCCGG CAGCACAGGG ACTGGGGGGC COGGGGTAGG AAGTGGGGGG
GCCGGGAGCG GGGGGGATCC GGCTCGACCT GGCCTTAGCC AGCAGCA

SEQ ID NO:1827: (Length of Sequence = 309 Nucleotides)

GTGTGCGCTT GTAGTCCAG CTACTCCGCA GGCTGAGACA GGAGAATCGC TTGAACCCCTG GAGGCGGAGG TTGCATTGAA
CCGAGATCGC ACCACTGTAC TCCAGCCTGG GTGACAGAGC GAGACTCCAT CTATAAAATA AAATAAAATA AAATAAAATA
AAATAAAATA AAATAAAATA AAATAAAATA AAATAAAATA AAATAAAATA TAAATAAAA TAAATAAAA TAAATATAA
AAATAAAATA AAATAAATA GAACCACCAT ATGANCCAGC AATCTCATTA GTGAGTATAT ATCCGAGGG

SEQ ID NO:1828: (Length of Sequence = 382 Nucleotides)

ATCTCTGACC ACCCCCTCTT CCCCATCCCA CCTTTGGTA ACTCCCCCGC CCAGGNCATC GCCCAGATAT ATTCTTCTCC
TTGGGCAAGA AGTTCTGTGC ATGCAGGTCA AATCTGAAAG GGNCATTTCT TTCTTTAATG AGTGTGAGGG ATGGGGGATG
TGGCTGATGA TATAAGGGGC CCTCCAATCA GACTTTCTAA TCTAACTGAA AAGNTAATTA CAATGTTGAT GCTAAAAAAG
AAGGTTCTGG CAAAATAGAA CTTCTGAAGC ATCATAAATC AGATGACTAA TATTGTGAT CCCCNITTA ATTTTCATGT
GAAGAAGAAT AGGGGATGTA ACTGAAGRAA TGNACTAAAA GTTCTTCTAT GTATTGATAA CC

SEQ ID NO:1829: (Length of Sequence = 361 Nucleotides)

GGCGCGCGCT CTGGAGCTGG ATGTCCAGGC TGCGGGCGCT GCTGGGCCTC GGGCTGCTGG TTGCGGGCTC GCGCTGCCG
CGGATCAAAA GCCAGACCAT CGCCTGTTC TNGGACCCA CCTGGTGGGG ACCNCAGCGG CTGAACTCGG GTGGCGCGTG
GGACTCAAAG GTCATGGCGA GCACGGTGGT GAAGTACCTN AGCCAGGAGG AGGCCCAGGC CGTGGACCAG GAGCTATTTA
ACGAATACCA GTTCAGCGTG GACCAACTTA TGGAACTKGC CGGGCTGAGC TTGCTACAG CCATCGCCAA GGATATCCC
CCCACGTCCA TGTCCAGGAG CCCCCCTACT GTCTGTGTC T

SEQ ID NO:1830: (Length of Sequence = 180 Nucleotides)

AAGAACGTTG GCTGCCTGCA GGAGGCGCTG CAGCTGGCCA CTTCCTTCGN CCANCTGCEN CTGGGGGATG TAAAGAACTG
AGTGGGGAAG GAGGAGGCTC CCACTGGATC CATCCGTCCA GCCAAGAGCT CTCATCTGC TACAAGAACA TTTGAATCTT
GGGACCTTTA AAGAGCCCCCT

SEQ ID NO:1831: (Length of Sequence = 335 Nucleotides)

AGATCTTCTA TATTCGACT ACTGATTCAA ATGCTAATCC TGGACGGGCA TGGTGGCTCA CACCTGTAAT CCCAGCACTT
TGGGAGGCTG AGGCTGGTGG NTCGCCGAG GTCCGGAGTT TGAGATCAGC CTGGCCAACA TGGTGAAACC CTGTCTCTAC
TAAAAATACA AAAATTTGCT GGGCGTGGTG ACATGCGCCT GTAATCCAG CTACTCGGGA GGCTGAGGCA GGACAATCAC
TTGAACCCGG GAGGCAGAGG TTGAGTGAG TTATTGCACC ATTACACTCC AGCCTGGGTG ACAAGAGCGN AATTCCATCC
CCCCACCAA AAGCG

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SEQ ID NO:1819: (Length of Sequence = 328 Nucleotides)

CCACTCCTGT AACCTGCTGG ATGACTCTGC ACTGCCCTTC TTCATCCTCA CCAGTGTCTT GGGTATCCTA GCTAGCAGCA
 CTGTCTCTTT CATGCTTTTN AGACCTCTCT TCOGCTGGCA GCTCTGCCCT GGCTGGCCTG TCCTGGCACA GCTGGCTGTG
 GGCAGTGGCC TCTTCAGCAT TGTGGTGGCC GTTTTGGCCC CAGGGCTAGG TAGCACTGCG AGCTCTGCCC TGTGTAGCCT
 GGGCTACTGT GTCTGGTATG GCTCAGCCTT TGNCCAGGCT TTGCTGCTAA GGGTGCCATG CCTCCCTGGG NCACAGACTG
 GGTGCAGG

SEQ ID NO:1820: (Length of Sequence = 359 Nucleotides)

CCACCATGCT CTGCACTGCG NCTGGTACCA GGCCCGGAC CTCATGCTCA TGAGCCACTT GCAGGACAAC ATTCAGCATG
 CAGACCCGCC AGTGCAGATC CTTTACAACC GCACCATGGT GCAGCTGGGC ATCTGTGCTT TCCGCCAAGG CCTGACCAAG
 GACGCACACA ACGCCCTGCT GGACATCCAG TOGAGTGGCC GAGCCAAGGA GCTTTTNGGC CAGGGCCTGC TGCTGCGCAG
 CTTCAGGAG CGCAACCAGG AGCAGGAGAA GGTGGAGCGG CGCGTCAAG TCCCTTCCA ACTGCACATC AACCTNGAGC
 TGCTTGGAGT TTGTTTTANC TGGTGTCTGC CATGTTCCT

SEQ ID NO:1821: (Length of Sequence = 208 Nucleotides)

CCTGGGTCTG TGACCCAGAG TTCCAACACA AAGACACTTT GTACTGGAAC GCTGGAGCCA TTCCAACATG AACAGCAAGA
 ATAGAACCTG TGCTGGCTGG TCTAAGATCA AACCTCGNGA TGGTGGTTTG AAGTNCCTCT TCAAAGAAAG CTTGAAAATG
 AAATCTCAGT TAGGCAAGNC AGATAAAAGC AGAGTTATTC TGGTGGCG

SEQ ID NO:1822: (Length of Sequence = 314 Nucleotides)

GGATGINTTG AGCCAGAGTT TAAGCCTGAC ACACAGGCTT TGGTCTCTAC TGAGCTGTCT CCAAGACTGG AACTACTTAG
 TGACTCGGCA AATTTTCTGC CCCCCACCCC TCATCAAAGC TGCTAGTTCA GATGTTGACA GTGTTTTCAT GAATGTTGGA
 ATCTTACTAG TCCAGACTTA CTTAGGATGT TGTGGGGAA GGCAGTTGGG ATTTTCTGTG TCTTGCAATC ACAGAGGGAG
 GCCATTTTCA ATTCAAGAGC ATTKGATTAG GGGATCGTGA GGCAGGGATG CTA CTGCGKA TTTCTCTCTT CAGG

SEQ ID NO:1823: (Length of Sequence = 344 Nucleotides)

AACAATTTTG TCTTTACTAC ATCTTAAAGA ATTAGAACTT GGGTGGTGT AAGTGACTTA CTTCCAGGNN ATCATGCTCT
 ATTTCTACCA GCAGGTGATA CCCNAATGTC AACTATCTA TTGTTAACCA TGAATGNTAT TCAGATCTAT TACTTTTCGT
 GAAAAGTGGG ACATGTTACT TCCAACCATG GCCTGTACCC GTGAGTGTGA TCANCTTTNT CCAAAACCAC ATGGGTGCGA
 GGAGCTAAGG GGTGGTACCC MAATGTTAGG GACAGTGTTA GGAAGGGCA AGGGAAAAGA AGTGACTNGA TGTCTTATGA
 GRAACCGTA AATGGCTTAA AAAA

SEQ ID NO:1824: (Length of Sequence = 340 Nucleotides)

GTGAGTGGCA GGTATCATGA ACCACATTGT GGACCTGGAG TTGCTAGGAC CTTTTCTGCC ATTACACAGA AAAATCCTCC
 CTGAGAACAC AGCCATTNGA GGNACATGG CAGAGGAAGA TAAGACAATA AACAGAGNCA CATAATTATG GCCAGGTGG
 GGGCTNACGG CTGTAATCCC AAAACTTTNG GAGGCGGAGG TGGGCAGATC ACCTAAGGTC AGGAGTTGGA GGCCAMCCTG
 GGCAACATGG TGAAACCGT CTCTACTAAA AATACAAAAA TTAGCCSGGC GTGGTGGCAC GGGCCTGTAG TCCTAGCTAC
 TCAGAGGGTT AGGCAGGAGA

SEQ ID NO:1825: (Length of Sequence = 357 Nucleotides)

AATTTGGTTG TGGCCAAAT CTCACTCAA TCACCTGGC CCAGGGCCTG GCGTGGGAGG ATGTGGCAGG CTCTGTCTCC
 TTCTGGGGTT CCTGGTCTGG AGGAGTCTCC CCAACAGCGC CAAAGCTGGC TGTTTTCCGC CCAAAGCCCC AGAAGTTTGA

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AGAGACTGAT ACCACTGGAG TGGCTGGCTT TTAATTCCTT TGGGCCAGAC CTGCAGCCTT GCCTTAATCC TTAA

SEQ ID NO:1813: (Length of Sequence = 344 Nucleotides)

CATCAGCGAC AGGTCTCCCT CCCAGAACCC CATCAGGACA GGAGAAAAGG CAGCAAGAGA GGTGGGGTGG TCCTGGCAGG
TGGGCCACCA GTNTTCTGAA TGAAGAGTGA GTCCCGGGTC AGGAGTCCAC ATCAGGTGTG GGCTGCTTCC AATCTGTAGG
TTCTCCTGGA GATTNTCACA ATCTGCCAGC TCTCTGGGAA TCACAGAACC ATCATGTCCC CTTAGGATGG CAGAAGATGT
GGCAGAGCCT CAATCTCCAA CACTGAAACA CTNAGAGAGC TTGATACGTT CCTTAGGCAG GGCAGAAACA TCACAGCACT
TCACGNTAGG AACCACGAAA GAGT

SEQ ID NO:1814: (Length of Sequence = 442 Nucleotides)

GACACAGCAG GCCCCTGCCC CTGAAGGAGA CTGCATTGGA ATTTTGGCCA GGTGGCCCTG ACACATAGGA ATGCCCACT
ACTGTGACTA CCTCTGAGA TAAAAGCTG TCCTACTGAT TTTAGAAGGC CAAAATTAGA GGTCAATTTG GAGGTCATGC
CAGTGGACAT ATAACAGTTT GAAATGCTTG TTCCCGGGT CCGTAAAGAA ATAGTACTTG AACTTAAATT TATTCAGCAA
GGCATTTTTT ATTTCTGCA GAAAGGTAC ACTTGGCAGC AGTTTNCCTA CGAGAGTACC CCGAACAAAG GAGACAGGGT
CAATTATAAC CTGACGCGTC CACCTTCTG CTGTGTCCGG TTTCATTGG CTGGAACAGG ACCTCACATT CTGTATTTGT
CCCATTGGC TAGCAACTTA GGACTTATTA AAAGAGGCAA AG

SEQ ID NO:1815: (Length of Sequence = 299 Nucleotides)

GCAGAGAATC CCTTGAACCT GGNAGGCGGA GGTTCNAGTG AGCCGAGATC ACGCCACTGG ACTCCAGCCT GGACAACRA
AAGGAACTC CATCTCAAAA AAAATTGAAA AAAAATTCAN GANATACAGA ATGCAAAAGG GGACCAAAA AGTACCAAAA
ATTTCAAAAT TTTGTTAAAC TGTACCAAAT CTGNTACGA AGCGTTATTT TTGCCACAG GGCACCTCCC TGGAAAGNCG
TTACAATAGC TNAGGCTTCC TCTTCAGATA GANTTAGAGT GGCAGTAGGA TAGGCTCTT

SEQ ID NO:1816: (Length of Sequence = 286 Nucleotides)

ACCCCGGGTC CCAGGTATGC TCCCACCTCC ACCTGCCCA CTCACCACCT CTGCTAGTTC CAGACACCTC CACGCCCACC
TGGTCTCTC CCATCGCCCA CAAAAGGGGG GGCACGAGGG ACGAGCTTAG CTGAGCTGGG AGGAGCAGGG TGAGGGTGGG
CGACCCAGGA TTCCCCCTCC CCTTCCCAA TAAAGATGAG GGTACTAAAG TTGTCTGGT TTTTATTTTA TTATTATTTT
TTTCTTTTTC CAGTATACTA GCTTGTCTTT TAAGAAAGGG GATATT

SEQ ID NO:1817: (Length of Sequence = 320 Nucleotides)

GAAAGGAAGG CCAGGGTGGG AGGAAGGATC AGCTAAATCT GAGGGAAGAA GAAGGAAGG AGAGGGACTA TTGCATAGCA
GATGCAAATG AAGGGACTGT CTTATTATAC AGTTTATCA TCTGTTAATA CTCATAATCT TGTTCTTTT TCAACTTTTA
TATAATTTTA TCITTACATT AGTTAAATCA AAAATCTTAA AACACATTTT AAACGTGGTC ATAGGTTACT TTTATATATT
ATTGAATTTA TAATAAACAT GTTCTTTTNC TGGAAACTGG GATGGNACCN CGATGGTGT TCTTGAATAT AAGAGTGTCC

SEQ ID NO:1818: (Length of Sequence = 356 Nucleotides)

CCCAGGAGGC TGAGGCAGGA GAATCGCCTG AACCCGGGAG GCAGAGGTTG CAGTGAGCCG GGATTGTGCC ACTGCACTCC
AGCCTGGTGA CAGAGCGAGA GTTCATCCAG ACACACACAT ATATATATAA TTNCCAAACA GGCTTTACTA AACCCCTGA
GGTCTCATGA CACAGTAGAA AATCATGATT TAGTAGAAAG AGCATGGTCG TAGGAATCCA GTAGATCAGT AGACCTGAGT
TAGAGTCCCA AATCTGCCAC TTTCAATCTG TATGGCCTCA GGCAAGTTAC TTAANCCTTC TGTCTCTCTG TTTTCTTTAT
AAAATGGGGG ATAATAATAG TAACTTCTTC ATAGGG

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GTCTCTAGCT TCACTCTGGC ACCACTGTGA GCACCGGGAA ACCTACCAGA AGTTGCTGGA GGACATCGCT GTCTGCACC
 GCCTGGCTGC CCGCCTCTCC AGCCGAGCTG AGGTGGTAGG CGCCGTCCGC CAGGAAAAGC GCATGTCGAA AGCAACGGAA
 GTGATGATGC AGTATGTGGA GAATCTAAAG AGGACGTATG AGAAGGACCA TGGGAGTCA TGGAGTTTAA AAAGCTTGCA
 AATCAGAAAT CAAGCCGAG CTGTGGCCCC TCTGATGGGG TCCCTCGCAC GGCACGGTCC ATGTCCCTCA CGCTGGGAAA
 GAATATGCCT CGCCGAGGG TCAGCGTTC TGTTGGTTCCT AAGTTTAAATG CCCTGAATCT GCCTGGGCAA ACTNCCAGCT
 CATCATCCAT TCCTCCTTAC CAGCTT

SEQ ID NO:1808: (Length of Sequence = 431 Nucleotides)

GGTACTTTTC CATTTAGATT CAAATGGAGC TAAAATTAAAG AGTTTTATGA GCTGTTAAGA ATGAGGTAGT TTCTCTAGG
 ACCCCCCAAA GACAGTGCAG GTAATGACCG TTGGGNTCTC ATTCTCGAT CTTTGATAGT ATGINTGGA GTCTACTCCC
 CAGGAGCCAG GACAGGCGTG AAGATGGAGT CCTGTGCGCA GCTGGAGCCT TGCCTAGCTG GTGATCACAC AGCCTGNCCT
 GTACCTGCAC CCCACTGGAT GGTGGTACAT GGTGGCAGGG ACAGGACCAC ACCAGTTAA GGCCAGACCA GGCTGAGTGT
 GACCCCTGAG GTAAACACTT CACTAAGCTG TGTCTGTTC ATGCCCCCTG CTCAGTGAAA GGTGAGTCCC GAGACCAGTT
 GGGTACCTCT CTTATGCGAA CCAGAGACAT T

SEQ ID NO:1809: (Length of Sequence = 401 Nucleotides)

CGTGAGGCCT TGAGCACAAG TGCAAGCGGG ACATCCTGCT CGGCCGGCTC CGGAGCTCGG AGGACCAGAC CTGGAAGCGG
 ATCCGGCCCC GGGCCACTAA GACCAGCTTC GTGGGCTCCT ACTACCTGTG CAAAGGAGGA GATCGACGTG TGGACCGAGG
 AGCGGAAGGG CACCCTCAAC CGCGACCTGC TCTTCGACCC GCTGGGGGGT GTTAAGCGCG GCAGCTCACC ATCGCCAAGC
 TCCTGAAGGA GCACCAGGGC ATCTTCACCT TCCTCTGCGA GATCTGCTTT GACAGTAAAC CCCGGATCAT CAGCAAAGGC
 ACCAAGGACT CTCGCTCTGT NTGCTTCAAC CTGGGCTGCC AAGAACAGCT TMTTACAACA ACAAGTGCCCT GGTGCACATC
 G

SEQ ID NO:1810: (Length of Sequence = 233 Nucleotides)

AAGTGCTATA TTCATTGTAT TATAGAGAAG GTTGGGGAGC ACAGAAGAGG ATCAACCCAG CTTTAGAAGG ATTAGAGAAA
 GCTTCCAGAG GGGTGGACAT TTGAGCTAGC AAGAAAGCAC AAGGGAAAAG GCATTTAGAC AGAGGAGACA ATTTGTCTTG
 ACCAGAAGC ATTTGGGTAT GCTATGCATG GATAGNCAA GAATTTTTCG AAAAGGGGGG CCAGCAAGGC ATT

SEQ ID NO:1811: (Length of Sequence = 423 Nucleotides)

CAAAGAAAGA GTTGAACAT GTACATTGAA AAAAGGAAAG ACATTTTTC ATACCAACCT TTCCCTAGTT CGCAGTTTCT
 GAATAGTAGA AACAAAACAC ATTTTAAAT CTTTCTATCA ATTTAATTTA GGACGAAGTA ACACAACTTT TATAATTAAAC
 CACTGAAGTT GTCTTTAAGG ACAAACCTTA AATTTTAAAA TGGGTGTTAC CATATTINAT GAGTGGACTG ACTCCAAGGT
 TGCCITGCTC CAAGNNTGGG CATCGTGACA TTGCCGTGAT GCCCAGAAGA AAGTTAATGG CAATGATGTC CAGTCAGAGG
 GCAGACATGC TACACATCAC AATGATGAGA GCTGCGGGAT TCTGCCCTCT TCAACTTCCA AGTAGNAAAT TATTATTTTC
 CATCAAACT AACTGGGAGT GAG

SEQ ID NO:1812: (Length of Sequence = 394 Nucleotides)

GACCAGCCTG GCAACTTAGT GAGACTCTGT TTCAGGAAAA AAAAAAAAAA GTGTATTGG CTGTTCTGAA GCAGGCCATC
 ATCACCTTC ACCTCACCA CAGGTGGCTC TCGGGGGCTG GTCCATGGC GGCTGTGGCG TNAGGATGGA GTCTAGCTG
 TGACCTGTGC CCAGGAGGGC GTGATCCGAG TGAAGCCCCA GGTCTCAGAG AGCAAGCTGT AGCCAGAGGT ACCAGCTTCG
 CCTGGGGCTT CAAGAACCCTC CCATCTATCC CCATTCTGA GACAGGAGTT ACAGTCCCTT TTGGNCTNA CATCCAATAA

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SEQ ID NO:1801: (Length of Sequence = 166 Nucleotides)

CAAAANTTAC TCTGCAAAAT TAATATATGA TTTACCTGCT GTTNTCATAA GATTTCCAAA TAGACAAACT CGGTATGCTT
NGGATTTGCT TTACATTCTA AGTGGATTG GAGGTCAGG CAGGCGCCAA GGAGINAGCC GAAGTTTCAT CANGCGGAGA
TGTGG

SEQ ID NO:1802: (Length of Sequence = 281 Nucleotides)

GGTGGATGTC TTTGGGCGCA GGATGGAGCC CAGACCCAGT GGTTACAGTG TGGAGCTCTC TCCCTGTCCC CTGACTCTGG
CCAAGGAAGT GAATGCAAAG CAGCAGGGAG GAGGCAGGGT GGGGACGGCC CTCTGAGCTC TCCGCGATGG CTGGCGTGAG
GTGCCTCTAA GACTTCINGG CAGCCCTGCC TTCCCTACTC AGTCTTCCCG ATCTTNTGTC CACCTTTCTG TGTGGGCCAG
NCTCCCGCCA GGTACTCAGA GGCCGCTCAG AGGGCAGGGT T

SEQ ID NO:1803: (Length of Sequence = 429 Nucleotides)

TTACAGTTA TAGTTGGGGA CATTACAAC CCTTCTCAA TAATTGATAG ACTACTAAAT AAAAAACCAT GAAGGATATA
CAAGAACTGT ACAACACTGG CCGGCTGTGG TGNCCTATGC CTGTAATCCC AGCACTTTGG GAGGCTGAGG CCGGTGGNTC
ACTTGAGGTC AGGAGTTCGA GACCAGCCTA GCCAACATGG CGAAACCACA TCTCTACTAA AAATACAAAA AAATTAGGCT
GGCTGTGGTT GGCTTAATGC CTGTAATCCC AGCACTTTGG GAGGCCAAGG TGGGCATATC ACCTGAGGTC AGGAGTTTGA
GACCAGCCTG AAAACATGG TGGAAACCCA TCTCTACTAA AAATACAAAA ATTAGCTGGG TGINGTGCGT CTGAAAAAAT
TAGGTAAACT CCGTCTCAA AAATAATAA

SEQ ID NO:1804: (Length of Sequence = 278 Nucleotides)

GACCTGAAGC TCAAAGTCTC TCTCCTTACA CAACCAGCGN CAACAGGGCC AAGCTACTGG CTAGAACAG ACAAACTTTC
CTGCTTCAGA CCACAAAGCT GACCCGTTT GCCAGACGCA TGTGCAGGGN CTNTTACAG CCAAGGAGGG CCGCCCGACG
GNCITATGCT CCTATCAATG CCAATGNCAT CAAAGCAGAG TGCTCCATTC GNCITCCTAA GGNCGNCAAG ACTCCATINA
AGATTCACCC TCTGGTGC GCTGNCCCTG GGAACAT

SEQ ID NO:1805: (Length of Sequence = 349 Nucleotides)

GCATCCATGG CGGAGGGCGG CAGCAGACG GCGGGGCGG GCGGGGCTCC GCAGGTCGTA ATCTGAAGGA GTGGCTGAGG
GAGCAATTTT NIGATCATCC GCTGGAGCAC TGTGAGGACA CGAGGCTCCA TGATGCAGCT TACGTGCGGG ACCTCCAGAC
CCTCAGGAGC CTATTGCAAG AGGAGAGCTA CCGGAGCCGC ATCAACGAGA AGTCTGTCTG GTGCTGTGGC TGGCTCCCT
GCACACCGTT NCGAATCGCG GCCACTGCAG GCCATGGGAG CTGTNTGGAC TTCCTCATCC GGAAGGGGGC CGAGGTGGAT
CTNGTGGAGC TAAAGGACA GACGGCCCT

SEQ ID NO:1806: (Length of Sequence = 403 Nucleotides)

GTGCACTGTG GCCAGATCTT TTCTAGTAAA ATGTGTGTTA CTGATGGGCA GACAGCTCTC ATTCAAGCAG TGACAGATGT
AAGCNCITCC CATTTTTGTG GCGCCATTGT ATTACGCGTG TGGCTTCCAA GTTGCCCTGGG ATCATCTCCA CCCAGACTAA
GGAAGAGGAA AGAGCTTGA CAACTGCACT TGGCTGTTT TNATGGATCA GGCAAGGAAT TGGCTCCAAC ACATTAGCTC
ACATTCATT GGTAGAACT GGGTTTCTCA ACTATTAGTA CAGGGTGAGT GTAGGGTTTT GGCACCATGG GCATTTGAGC
TGGCCAAAGG CTAATCAGAG TTAGAACAAA GCCACAAAGC CTGTGAATGG TGTATTATTGT TGTGAGGAGC TGTCTTGTGC
ATT

SEQ ID NO:1807: (Length of Sequence = 426 Nucleotides)

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GAAACGCTAA GGTTTTGACA GGGTTACAGT GAATTCTCCG GCTGTAGAGA TTGGAGGAAG TGGGGAGAAA TTCGTCTCTA
 AGTGTGAAGG TGGAACAGCA TTCAATTTCT TACTGCCAAT GGAGGTTTTT CATGAATTTA CTAATCAGT AAAAAGATTC
 GGCITTTTTT TTTTAATCTT AAAGGATCAC GCTTTAAACC TCTGTAACAA AGTAATTATT TGTACCACTC TCTACCCAC
 CCTCCAACAA AATAACCTAT CGGNTCTCAG AAAATAATAA CCCTTTGCCT GCCTTTGAAA TAGTTATCCT TTTTAGTATG
 ACAGTGTTC AAAATCTTT TCTTAGACTT GTAGCAGAAC ATAGCTATGA TGATCTGAAT TTTTCTCTTT CAGCTTGTTC
 TAAGACGAGG GGGACTCC

SEQ ID NO:1796: (Length of Sequence = 416 Nucleotides)

CTTTATTACA TATGCAACCT TGCCATGCCT GCCAGTTAAC TCCCCTCCCG CCAATGTTAT CCTCATGATA TCAGCTCCCT
 CTGGGGGCA CTGAGCTGCC CCCCCTTCCT TCTGGGCTGG AGTAGTGGTG CCCCCTCAAGC AGGCAATGGG CAGGGGGAGA
 TCCACAATTA ATCGTGCAG TTCTCTTAAA AGTATTAAAC CTTAAATAAG CACTCTTGGG GAGTTGCAAA GGATATTACG
 GATGGGATGC AGTGGGAGGC TACCCCTCAT CCAAGGTACA GGCTGGAATG AGCTACAGCT GGGTCTATCG TGGGCCTCAG
 AAGGTGAAGA GGGACCTAT TCTGGGCTT AGTGTGGGTG GGCATATCC TCCCAAACCT TGTTCGTGG GCGATGTTCT
 TCACATCTAG GAGAGC

SEQ ID NO:1797: (Length of Sequence = 298 Nucleotides)

AGGAGGGAAA CCAGAACTAA ACTACTACTT CTAGATGAAC ACAGGCTCTT GAGAGTCCCC AAGAGAGGAG GCTGTGATC
 CAATCCTGAC TCAGACTACC TACCTGGCTT CCTGGCCCTA GGAGGTAAAT ATGATAGTNT CAGGGGTCC ATGTAGCAAT
 CCAAGCAATT CCTGAGGTGA GAGCAAGCAA AGAGGATAGG ATGAAGGGAA GGCAGGCAAA GAATGTGCTC CTAGTAAGAA
 GCAACTCINT TCCACTCACT TCCTTTGCT CINTGGCAGG CAAGTCAACT GGGTCTC

SEQ ID NO:1798: (Length of Sequence = 245 Nucleotides)

CTGTCCATT TTTACAACAN ATACATCCAA AACACTATAT AATANNTTTT TTTACAACAT TTCCAATGA GAAGATTGCT
 TTTNCCCCA CTACTGCTAT TCACACACAG TACTTCCAG GCACAATACA TTAGGAGATC TAAAANTGCT CACCTGTAC
 TCTAGGCTGC TTAGGAAATG TGAAACTAG NAACATTTAT AATGGCATT GCTCCTTTCA ATACAAGGCA ACATTTTAGN
 AACCT

SEQ ID NO:1799: (Length of Sequence = 312 Nucleotides)

GAAATGTTAG GCTAGTTAGA AGGACACGGC AATAGCCTTG AGATTYTCAA CCAGGGTAGT GTATTAGAWG TAAAAAGGAG
 AGGAAAGATT TGAGAGTTAT CTCAGAAACA GAACCATCTA ATTTTTTTGG ACTGATTTGA CTGCTCTTC ACTCATTTTT
 TTATTCATC AACAACTATT TTTGAKTNT TTGGATGGGT CAGACATTGC GCTAAGTGAA AAATAGGAAG GTAAGAAAAA
 GAAGACTCTG AAGATGAATT CCCTCCCCAA AACTGAGCTA CTAGCTATTA CTCAGTGGG CTGAAGTGAC AC

SEQ ID NO:1800: (Length of Sequence = 309 Nucleotides)

GGCATGTGAC ACTAGGCCAC AAGCGATAAG CACAGGCACC TGACTTTTAA GTTTTGTGTT GTTTGTGTT TCCCAAAGTG
 CTGATAACAA TAACAACAAC AATAGGATTC CAACCAAGNG CCTCAAGTGA CAGCCAGGNA GAGACCTGAA GGTGGGGGCC
 ACCACAATGC CAAATCGTTT CTAAAGGAAG CTGAAAAATG GGACTGTCTT TTGCCCACTT CGTTGTGTTA AAAGGGGACA
 TTTGTNCAA CTNCCAACC GAGTCTAGA AGNTCTGAC AAGGAGGCAG CATCCAGCCT TGACCAGGC

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TTCAGTGCAG AAGTCAGTCC AGGTGGGTTC AGGCCCATGC CACCTTCTCT GGCTGCACA GTCCACCCC AGGCAAGGGG
TTCITTCAG AAAGGCTAAA TGCTCTGTCC TAANCCTNGG AAGTGTCCCT TTCAACTAAA CCCCTGGCCT T

SEQ ID NO:1789: (Length of Sequence = 312 Nucleotides)

CAGGGTGAAG TGAGCCTGTG TGGGAAATGA GTCTAGTGTG AGGAGGCCTG GCTGCTATAA TGATATTTAT CTCACAGTTT
ATATTTCATT CATTTATATT ATTTTITTA AAGGTTTCTT TATCAGCTAC TAAACATCTC AGCAATTTGG TGTGCATAGC
TCTAGATTAA GCAACAAAGA ATTGTACTGA TAACAAACCA CAGGGGAAAT GGTGGTTAGT AAGAGTCAGC CTTATAAAAT
TTACATCCAC ACTGTTTCAC AGCAAGATTG CTCTCTCCAA AACGTAGCCA TCAAAAGCAG CAAACAAACC CT

SEQ ID NO:1790: (Length of Sequence = 281 Nucleotides)

TGTTTCCYTC ATTAGCTGTA GACTATCCCC TCTCTCCCA CCACAWTGT TCTWTGATGA KTTACAAACA GAAAGGAAAT
CACATTTTCA TACTAAAAAC AAAATGWTC GAGCCTTGAT TTYTCCACTA GAWACTACAC GTACAGTTAA GAGTCCACAT
GCAACACCTT AAWTCACAGA CTGAGACCTC ACATTYTGAC CTGGAGNTTC CTCCCCTTCC CCAGCCTTGG GCTAGCTTTG
GCCTAGGCTC AKGTAATACT GACACCACA GCGCTGCTC T

SEQ ID NO:1791: (Length of Sequence = 261 Nucleotides)

AGGCAAGCA GAAAGGTGTG TTTGCCAGAC CAGCATGGGC AGCTCAGAGG GAGCAAAGCA TCCACCAGAA GAGGCTCTCC
ATTTTTTTGT AGGGCCTGAC AGTTGAGATT TGAGGCTGAG TTAACAWTGG GACCACTGAA CTTTITTTCCA ATGGAAYT
CACGGCCAG TCCACAGGA ACTTTGCGC ATACCAAACA ACAWTGAGGA AGGAAGGGCC GGTGGCTCT ACCAAACAKT
TCAGGTCCAC TGGGTGAWTG A

SEQ ID NO:1792: (Length of Sequence = 324 Nucleotides)

CTCCATCTTT ATGGGCTGTA TAAACATCTC TGGTCTGTAC ATACATTTCA TACATCGTAG GGTGGGAAGC GAGGGCCAAA
GGGAGGCCCA GCAGCACAAC AGCTCACCCG CTTTCCCTAC AGCCCTACCC GCTCTGTGCA AACCAAGGCC AACAGCTCCT
GCTGCCCTCT CTTCCCTGGA AAAGTCACTG TTATGGGGAG GGGGCCAGGG GTTGAAGGAT TAGAAGGAGA TAGAGGGCTT
GGTGGGGAGG CCACATNTAA GTCTAGATT CAAACACTGA AGCGAAACAG GCAACTGGCA CAAGCAGCAA GCTTAGGCAT
GGGC

SEQ ID NO:1793: (Length of Sequence = 386 Nucleotides)

ACTCTTGGGG ACCCAAAGAT GTCAGGTCCC CATACTCTGA GGAATCAGGA CACAGCCCAG TGCCTGACAC CACAGAGTGA
GGCAGCCCTT CGGGTGAGGG CCTGGGCCTC GAGGGATGCG AGCCACCACT GCCTAGGCAA ACGCACCTGG GGCTGAACCT
GGCGCCCGGC ACTTTNAGGA CGCCAGCACC AGTGGGCACT CGGAAGTGCC AGTTCTGGCC CAAATTTGGT GACCTGGGTC
AGAAGGACCT TTCAGAAATGA NTGTTCCCG TCAGCAGATA CCGTCAAGAC ACGGCTGGCT CTGAGAGGGG CTGGGTGCCC
GTTTGTGCTG TATTCTCTG GGGGCCAGCA CGTCTCAGAG GGTGTCCCTG TGGGTCCCG GGTCA

SEQ ID NO:1794: (Length of Sequence = 308 Nucleotides)

GGATGCTCTT TAAACATGC AAATGGGCC GGGCAGATG GCTCATGCCT GTAATCCCAG CACTTTGGGA GGCCGAAGTG
GGTGGGTAC CTGAGGTGAG GAGTTCAAGA CCAGCCTGCG CAGCATGGTG AAACCTCATC TCTGCTGAAA ATACAAAAT
TGGCCAGCG TGGTGGCATG TGCTGTAAAT TCAGCTACT CGGGAGGTTG AGGCGGAGA GTTGTITGAA CCCGGAGGT
GGAGGTTGCA GTGAGCCGAG ATTGCACCAT TGCACTCCAG CCTGGGTTGA CAGACGAGA CTCTGTCT

SEQ ID NO:1795: (Length of Sequence = 418 Nucleotides)

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AGAGCTTAGC ATGCTGTGG TTCATGTTTT TATGTGTTA TTCACATTG ACTTTGCCG TGAGCTTTGA GGGAGACAAC
ACCATCACAT ATGTGTAAAT TGTAAGAA TGGGAGAGA ATAGCTTTGG GAGATCATT TCTTACTGGC CATGATGAAG
AAAGCTGTAT CGTAGGAAAA TTAGTAGGTA ATTTTACTCA CTGATAAAG TTAATTTGCA AGGTATCAIT CGATTGGTAG
AGTTACCAA ATGAGAGTTA AAGAACAGA AATATGGTT CAGTTTATGG TGCATTCTTA TCTTTTTCAC TGAGTCTATT
TCTGTCTGGT TGCTTCACCT AGTACTCCAA CCAGACAAGA GGAAGACAAC TATGCTAGTG TTTTAGGAAA TGGGACAGAA
TGGGGTGATT TAAGTAGGAG CCNGGGT

SEQ ID NO:1784: (Length of Sequence = 428 Nucleotides)

ATGGGATACT AATGCAAGCA TTCAGTGAAG AAAGTAGATT ACCAACTAT ACGATCCTCA TTTATTTTAA AAAGTGATAT
CACCCAGAAA AAAATAAGAA AGATAAAGA TGTGTGTAAG ATAACATAAG AATAAAAATA TAGGGGAAAA GGTAGCCAAG
GGATAGATAT TGATATTCAT TTTCTTTTAA CAACTTTATT AAGTTGTAAAT TTGTGTGCAA CAGATTGCAT ATATTTGANG
TATATACTT GACTAATTTT GACAAATATA TACACCCATG AAACATCCAG TTATAATTTT AAACATTTTC ATGGCCCTCC
AAAGTTTCCT TGTGTCTTTT TGCAATACAC GCAACACAC ACACCCCA CACAGTATGT AGGGCAACCA TTGATCTGCC
TTCGTTCACA ATAGGTAGG TTTGCATC

SEQ ID NO:1785: (Length of Sequence = 414 Nucleotides)

GTAACAGAT TACATTTGAA CACCTAAATA AGTATTGTG TCATAATCAT TACATGCTTG TTTATGATT ACAAGATT
GGTAGAGAAA AGTACAGTCC TTAAGGATA TATATGCCAA TGCATTAAAC TACTCAGCTT TTGTGCCAGC TCAGGTGTTT
ATAGGAACAG GAATGTGGAA TACCAGCTTT TACTTTAAT TACTACTTTA TGCTGAATTT TTCTTCCAGT TAAACCTTTA
ATTACACTAG TATGTAAAGT AGTTACTGAG AAAAATAAGT TTTTGATTTT CCTTCTGTG GATCTGTAAC ATTTTAAAT
GGAGCTATTT AACACATGAC ATGCTAATGT TACTTAATGG GTCTCTGCAT TTTAATTTTA NGAAACACAA ACCTGGGTCA
CAAAACATCT TCAG

SEQ ID NO:1786: (Length of Sequence = 397 Nucleotides)

GTTATTCCAA CCAAAATTTT CTAAGATGA AATGCAGAAA CTACAGAAT TGAGTAAAA GACAAAACG TAAATACTAA
ATATTGAAAA GATGCAAGIN CTCCCCAAT AACTCATAG ATTTAATAAA ATTCAAATTT AAAGGCAAT AATTAGGGAT
GAGGCAAGAA TCTGGGAAGA AAATTAATCT GAAGTTTGTG TGGAAAAATC AATGGGTGAA ACGAAAATAT TTTAGGATAA
GATTAATGAG AAGTAAAATT ATTTCAATTA TAAANGTAAA ATGATAAAAT AGTTAGACCT ATATGGTACT GATGCCAGEN
ATGTTATACA AAGCTACGTC AAGGCTTGAG GATAATTTIN TTGAAGATAT TCGTGGGTAT CTCATTGGCT ATAAAG

SEQ ID NO:1787: (Length of Sequence = 408 Nucleotides)

TCCACAATT GACAATATAT ATGCATGTT TTAACCAA TCCAGAAAGC TTAACAATA GAGCTGCATA ATAGTATTTA
TTAAGAATC ACAACTGTAA ACATGAGAAT AACTTAAGN TTCTAGTTTA GTTTTTTGT ATTGCAAAT ATATTTTINC
TGCTGATATA TTAGAATAAT TTTTAAATGT CATCTGAAA TAGAAATATG TATTTAAGC ACTCAGCAA AGGTAAATGC
ACACGTTTTA AATGTGTGTG TTGCTAATTT TTCCATAAG ANTTGTAAAC ATTGAAGTGA ACAAATTACC TATAATGGAT
TTGGGTTAAT GACTTATGAG CAAAGCTGGT TTGGCCAGAC AGTATACCCA ANCTTTTATA TAATATCCAG ANGGCTATCA
CACTTGTG

SEQ ID NO:1788: (Length of Sequence = 391 Nucleotides)

CAACTTGGA CAACTTTT TTTTGAATGC TGGTCTGATC AGTCCACGGC CAGGGGTAGG TGGTAACTAG AAACAGCTGG
AAGGAGGGAA GGAGAGGGGA CCAGCAGTCC GCAAGCAGGA GGAAGGAAA GGGTTGGGA CAGGAGGAGG CAAGGCTGAG
GAAGGACCCA GCCAGCTGGG TGTCTGCCCC GGCTAGAGAA CGAACCAACC CCACCCACCA GGCTACCTC CATCTGTGGC

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CCAATGTCCA CTCTCTTCTC AAAGAAGTTC ACCAGCACGG ACTCCGTCAG GATGGAGGCC AGGTTCTGCT CAAAGGAGAT
GCACCACTCG GTGTGACCG TGCCGCGGAT GCGCGCTGTG GGGCTGCAGG CCTNCCCGCC CACCAGCACC GTGTGCTCTG
CAAGGTCTTC ACATTGCAGG GAGCCCGTNC TGACCACCGA GTAGGAGGAC ATGGACATGT CGTCTTT

SEQ ID NO:1778: (Length of Sequence = 297 Nucleotides)

CCCCCAACT AGAAGAATAC AATTAAAAA AGAGGCAGTA CACATGGTTA ATAAACAGAT GAAAAATTA AAATTCATT
GTACTATAAG ACAGGCAGAT TAAATTATTT TTACCTATCA AATTAACCAG AACAAAGGCA TGCACTTTAG TGAGGATGAG
GAACATACAG ATTCAGTGGT GAAAGTAAAT GTACACACAA CCTTCAAGT TGATAGTTTG GCAGAAGTTG CTAAAAACAT
TTAAAGCTTT CATACTTTTG ATAAGGCTTT TTATTTTAGA AAACATATAA ATAAAAA

SEQ ID NO:1779: (Length of Sequence = 353 Nucleotides)

CAGAAGTAAA AGATTTTWTAT TGTCTATAG AACTTCTGA AAAGAGATCT AATTGAGAAA ATATACAAAG CATTTAAGAG
TTTTCATCCC AGAGACTGAC TGAAGGCGTT ACAGCCCTCC TCTCCAAGGC TCAGGGCTGA GAACGGTTAG CATATCGAWT
GATCAGTAAA AACATGCAAA AGTGAGAAGG AAAGGGAAAA AGGTGCATTC CCCTAAGCTG AGGGGGATGG AATTTTCAGAA
CAGAGGAGGC AGGGTGGACA AGTACCAGGT GGCTCTCCCT TCCCTCTGT GTTATCTTTC AAAACAGTTC CCAAGCTTNG
NGGAAAGCAA TGAGCTCCAC CCTATTCAGC AGA

SEQ ID NO:1780: (Length of Sequence = 428 Nucleotides)

CGGCTTCCCC GGAGCAGCCG ACAGGGCCAC AGGAGAATGG TATGCTGCTC GGCATGGAGT GAAGACCACC CCGTGTGCAA
TCTGTTCACC TGTGGGTTTG ACCGGCAAGC CATTTGGTTGG AACATCAACA TCCCTGCATT GCTACAAGAA AAATAAGGAC
ACCGGCAGCC CTAGTTTCA CTGTTTGCCA GCACAGACCT TTGATGGGTG CAGGCTTTTC TCGTATTAA TCAGCCATTT
TTGTGAGAGT TTGACCCCTG AAAGGGTGCT TTGTATATGT TCTTTTCACA TAGTGCCAG CTTGCATGAA ATGTACAGAG
AAATGIGTGG TCGTATTTT TACTTTTGTG TTGTATATGT ATGGATAATT NGGGTCCCTT GGGCAGTAGA GGCAAAGCTC
ACCTCCCATG TAGCATGA AAATGCTT

SEQ ID NO:1781: (Length of Sequence = 459 Nucleotides)

ACCTCAGATT GTGAAGGGCT CTGTAGGCTA TGTTAAGGAC ACTAGAAATC TATGAAAGG TTTTAAGCAG AGAATTGACT
TGCTCATATT TTNCTTCAA AAAGCTCAAT AGCTACAAAA CGGTCAATAG ATGGTAGCTT TGTGGGGCTG GGGTGAATGC
AATGATATTG CAAAACAAGA TATAGGGAGA CAAGAACTTT TAATAACCTA AACCAGTGGT TCTCAAACIT TCCATGCATC
AGAATCACCT GGATGACTTG CGAAACACA AATAATCAGA CTTAATCCCT ACATTTCTG ATTTAGCAGG TATAGAATGA
GGTTTAAGAA TTCTAACAA GTTCCAGAT GCGTAAAGT GTCTCTCAGG GTTTTACTT GAGCAACTGG GTGGATCCNG
TGGATCTTAT GTCCCTNCGA GTAAGGGGTC AGGTACAGCA TTCTCCGGTC AGATGTGTT

SEQ ID NO:1781: (Length of Sequence = 420 Nucleotides)

GAAAGCACAG GAGCCTGCTT CCAAGAGGG ACTGTCCGT AATTNAGAGA TGCTCCAAGG CTGACCATCC TCCTTCTCCT
GCTGCACACC CAGCAGCCAT CTATGGCTGG ATTTGGAGAA TTCTGGTCA AACCGTGAG TATGAGGAGA GCAGGGCAGT
TGGGGAGAGA GGTCCAGCC CAATTCTGCC CAGAGAAGCT CCCAAAGAG AGGGAAGTGT CCTGATGAAG AGCCCATGAA
AGGGTGAGAA CCCAGGAGG TGTGGAGATT GCTGCGGCT CCTCTGGTCA GTAAGGAACC CTGACAAGAT CCCTAGGATG
GGGGTCCCTT AGTCTCACTG AAGTTCCTGT AACTTNGGAT TGGGGCCAGG TCANCCCTCT CTGATACCCG AGCTACAMAT
CTGGCTTCCC AMTCTAGAG

SEQ ID NO:1783: (Length of Sequence = 427 Nucleotides)

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CAGAAAAGGC AAAGTTTATT CCAGTGTGA CAGAGAGAGG GTGAGCCTTG CACAGCAATT CTAAAAACAT GTCATCTCCT
 TCACCTAAGA GGTAAGANCC GGCTGTAAGT CATGGGGTCA CTAAACCGGC CGCAGTTACA GTAAGCAGAA GAGGTCAAGG
 CTCAGGCCTT CTCAGACTTT CCTGGGACA CACGGCTCTC TGGGGGGGCC CGGOGAAACC ACTCGGACCA GGAGCCATCG
 TACACGGCCA CATCAGGCTT NCCGAGAGG TAGGCAGCCA AGGNACGTG GCAGGOGGTG ACTCCCTTGC GGCAOCTGGC
 AATGAGAGGC TTCGAGAGAT CCACCTTCTT GGGCTTGAAC AGAGCACGGA GCT

SEQ ID NO:1772: (Length of Sequence = 281 Nucleotides)

AAAGTGTGG GACTATAGGC GTGAGCACTT GCATCCGGCC TAGGTGGGGT TTGTCCCCG TTCTGCAGGA GGGAGACTGA
 GGCTGGGAGG TTCAGGGCCT GCTGGCTGT ACCCAGCCCC AGTATGTGCC TTGGCCACAC TAGTCAGATC CTTCCCTCC
 CACTCCTGCC ACCCTGCTCC TGCCCTGTCC CATAATCCAG GTTGAATGGG GGTGGGGATT TTNGGGAGCA AGGAGGGCTC
 AAAGAGATGG AGATAGGCT GTGTTCAGGC CAAAAGTGCA A

SEQ ID NO:1773: (Length of Sequence = 401 Nucleotides)

CTCTCTGCCA TGCTAACCA CGTAGAAGAG AATAAGATAA AGCAATGAAA AGCAGAGTGG CACTCTGATA TATAAGATTG
 TCTAAGAAAT ATAGAGTGAA TTTTGCCCAA AGGCCCTCAC TGAACATAAT CCTGAACCAA AAGAGTATTT CTTAATCCAA
 AACTTTACAG TATTAGACCT ACGAATTCTG ATGATGCCTG ATCAGATGCT AGTTGTTCTC GACAATCCAT GCAGTTTCC
 AGTATGAAGG AAAGTAACAA ATATACCATG GTTATTTCTA TTTCTTTCTG AAAAAATATCT AGGATATTTT ATAGTGTGAT
 GTGGTAAAT ATTCATTGA CANICACAAT GAAGTATAAT CAGAAGTATT AGCAATTTTA CTTTGTATTAT CTTGTTAATC
 C

SEQ ID NO:1774: (Length of Sequence = 230 Nucleotides)

TCTGTAAAA AAAAGTAAAA ATGTTACACA TAGGNAATAA ATGTAAAAAG CTATACTTTG CCAAAATAAA GTTTCAGCTG
 AAGGTAATGC TAGTTATAAA TTAAATACAA TTCTATTAG NNCTTGCAAA AGTCAAAGGA AGACGNAATA CCCCCTCTT
 TGGCAATTCA AAGGCAAAGA CCTGTTCATT TATTCTTAAT TTNCTTTAT ACAATCATT TCCCCACAG

SEQ ID NO:1775: (Length of Sequence = 359 Nucleotides)

ATTCAGGACA TAGGCATGGG CAAGGACTTC ATGACTAAAA CACCAAAAGC AATGGCAACA AAAGCOGAAA TTGACAAATG
 GGATCTAATT CAACTAAGA GCTTCTGCAC ATTAAAAGAA ATTACCATCA GAGTGAACAG GCAAACTACA GAAAATCTAC
 CCATCTGACA AAGGGCTAAT ATCCAGAATG CTACCTAATT TTAAAGACT TTTCCGGCA TCTTGAAAAA AACCACCAAT
 ATTTGACATA GGTAAACTG AAAAAACAAA CTATTCTATA TTACAATTG TGACACATTA TGTAGTAGCT AGGTTTCATCA
 CATAAATTAC ATGNTACCCC AGTTCAAGTT AAATTCAG

SEQ ID NO:1776: (Length of Sequence = 375 Nucleotides)

GGCAGAGGCT GCAGTGAGTC CAGATGGTNC CACTNCACTC CAGCCTGAGT GACAAAGTGA CACTCCATCT CAAAACCCCA
 ACTCCCCCA AAATTTTAA TTGGTTTGC ATTTCTTTGA TTATGTTTGN GGTCGATTGA GACTTGAGGC TGGCACTGGA
 GCAGGCGTTC CCACCTGTCC CGTGAGGCAA AGGTGCTGGG GAGTGACCAA GTGCATCAGG GGGTGCAGAT GCCTATTCT
 GGCTCTTTCA CGCTCAGCCA TCTTAGCATA NGTGAATATA CCATGAGCTG TTTCTCAGCT TGTTTTATTT TCTGGNGAG
 ATAGATGTCA CTGGAATGNN CTTTNTCCAA GTGAAAGGCC ATCTGTGCT ATGAC

SEQ ID NO:1777: (Length of Sequence = 387 Nucleotides)

GATAAGGGAG GAAAGGCAGG AGGAGATGAG GCCAGCCCCA CTGATGACAC CTTGGGCCAG GCCTCACAGC TGCAGGCATC
 AGCCGGAAAC TCCAGGCTGC TCATGGTCAC TGGCGGTGCT GAAGTGTCTC TCCACTTINT TTTGGTCTT GATCTGAGT

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GGAGGCCAAG GCTGCAGTGG GCTGTGATTG TNCCACTGCA CTCCAGCCCA AGTGACAGAG CAAGACTCTA TCTCAAAAAT
 CAAACAACAA CAACAACAAA ACACCACATA CACACACACA ATGAGGGTAA ACAAATAAG TATGTGTGGG TCACACTTCA
 GCAGGGGTTG CTGGTTTGCC AGAGGAAAGT GCAATTATTT TATCTATGGG TGTTTATTGT CTCCACTCTA AACTGTCAGT
 TACAGATGGC AAGACTGTTT

SEQ ID NO:1766: (Length of Sequence = 373 Nucleotides)

GTAAATACT AAGACACTAA ATGCGTATTT TAAATTTGCC CATTAAGTTT TGGGCTGCGT AAGAAATTAG TAAAAATAT
 TTCCAAATAA CATGCAGAAG TTGTTTTTAA ACTTAAAATC TCATATTTTA GCTACACCCA CAGCGATGCT ATAGAGAGGA
 GCTGGATTTC GTTGATCTG AATGGCTCAG ATTATGTTCC TTCCAAAAA GTTATTTTAT GTACGATCAT TTTTATATG
 ANGCAATGA AAAATCACCC AGAATCTACC ACGTATTTAC CACATAGACA AATGTCCATC TTTAGATCTG TCATTCAACA
 CCATGTTATT CTTTATATGC AACAGAATGC AGTGTGTGA GAAGTACATC AAG

SEQ ID NO:1767: (Length of Sequence = 330 Nucleotides)

GGTGACAGTG GCGGCANAGC AGCAGCATGG TGGCAGCCAC CAGTGGGCGT GGGGCCCCCG GGGGAGAGGA TGCCCCAGAG
 GTGCATGAGC AGACCTCGTA ACCGTCTCTC GAGCGCTCT GTTCATGTTG TCCTGGAGGG GCGCGGGGCC CCTCTGCCGC
 GTCCACGCCC GCAGCCACAG ATCCATCGGC CTGTGAGTCT CCACACACCA GCCAGTCCCG GGCCGTGGAC TGTGGGTACC
 CGGGTGCCAC CTCCAGCTCG CCATCCAGCA CTTTCCAGTA CTCTGGCCA CGGAAGAAGT AGGAGGCACC GTNGGACCAG
 CGCATGGCGT

SEQ ID NO:1768: (Length of Sequence = 361 Nucleotides)

AACTGGAAAA CCAAGACTGG TAGACTCTCT TTTCTCTCAG ACAATAGGCA GGAGCCAGGC GGAGTCCAGG GATTCTTGGA
 ACACCTATCT TTTCTCTCGA GGACACTAAG TTCTATTGTA AGACAAAGTT CAATATGGCA ACAGGACTGA TGGGACACGA
 AGGAGTCGCT ACCGTGATTT GGTGACAGTT CTTCAAAACG ACAGTNTCTC AAGGAAAGGT GGACCTAGGA ACTCTGAAC
 TTTTGGGTTG CCTTAAGTGA GAAATCAGCA TGGCTCAGGC AAGTCTCTCT GCTTGTGAAG GCCTAGCAGG TGTGAGTTTG
 GTTCCCACTG CAGCCAGCAA GAAGATGATG CTGAGCCAGA T

SEQ ID NO:1769: (Length of Sequence = 389 Nucleotides)

CAACTACCGC AGCGCCAACT TCAGAGAGCA CATCCAGCGC CGGCACCGGT TTTCTTATGA CACTTTTGTG GATTATGATG
 TTGATGAAGA GGACATGATG AATCAGGTGT TGCAGCGCTC CATCATCGAC CAGTGAGCAG AGTCCGTGCT TGCTATCTGT
 CTCATGTTAC AGAGCTTCCA TTACATATTA AACGTGAAAT CTATGACTCC TGTACCTTAC CTGTTCAACA GACCTGAAAA
 TGAGCCATGG CATTGGGACA GGGTCACITC TGACAGGGGA AGTGGGTCCC CAGGTCAGCC CTTCTCTTCC CTTTGGGCTC
 TTGCCAAAGN TGTCTTCCCC TACTGTTAAN CTTGTTGTG ACACGGTCCA GTTCGTATTG GGTCTCTCG

SEQ ID NO:1770: (Length of Sequence = 394 Nucleotides)

GCAGTTTAGA GGAAGCTCCT TCTGGGCAAG GTCAGGCGGT CCTCCTTCCC TCTCTCTTCC CCCTTTGTCC CAGCCTCAAC
 TGAATCTGGC TGTGGGAGGT GTGGAGGGTC CTTAGGCTTC CCTCCCCAAC CTGGCCTCCA CCAACACCCC TAACAGGAGG
 CCGTGGGAG GCTCAGCCTC TCTCCGCAT CCTCCTCTCT TCTGCTTAT CCGAGGGAGC CAGGGTCCCC TAGGCTGACC
 CTGAATCCTC TTCTCTCTT CATGGGAGGG GGGCAGGAAT CCAAGAGGAG ATGAAGCCAG CCGGACCACA TGGCTTNGTG
 GCTTNGACAA ACAAGCTCAG GGAGGAAATG AGGAGGCGNC GGCCTCAGAG GATTGCAACC CTGTTGGGCA CAGA

SEQ ID NO:1771: (Length of Sequence = 373 Nucleotides)

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SEQ ID NO:1759: (Length of Sequence = 386 Nucleotides)

ATATATTTTT TTGTATAAAT TTCTTTGTAT TTTTTTCCTG CAAGACTTGG TGTTGGCGGC ACTGTTGTAG TTAACTTCA
 ATCCCAAATT CCATGAAATA GAAATCAGAA GTAAAGGTTG AGAGGGGAGG AAGGAGGGAG GCAAGCCAAG GAATAAACAA
 GAGTTTGA CT AGAAAAAAG AAGAGGGTAT GTGTGGTGGG CATTCTGGG CAAGGCATT CCTTGAGGGA GGGGGTTGGC
 AGGCAGCTTG CCTCTGCCTC ATGCAGGGGA GGGAGGAAAG ATCCCTGGG GACCCCTGCAG TCCCCTCTTC CTAGGGCTTC
 CTGCTCCAG GGGAAAACT AATACCAGAG AGGGATCAGC CACAACCTNA AACAGGGCTC TTCACC

SEQ ID NO:1760: (Length of Sequence = 395 Nucleotides)

CTTCATGCCT CTGGCCGGGT CCAAGCTGGC CAAGAAGAGG GAGGAGGCCA TTGAGAAGGC CAAGCGGAG GCTGAGCAGA
 AAGCCCGAGA GGAGCGAGAG GNGAGAAGGA GAAGGAGAAG GAGCGGGAGG AGAGCAAGAG CGAGAGCNTG AGGCAGAGCG
 GGGCGCTAAG GCGTCCAGCT CAGCGCATGA AGTGGCCTC ANTGACCCAC AGCTCAGTGG TCCTGGCCAC ATGCGGCCAT
 CCTTCGAGCC ACCACCAACC ACCATTGCTG CTGTGCCCC CTACATGGG CCGACACAC CTGCCCTTCG GACTCTGAGC
 GAGTACGCC GGCCCCACGT CATGTGCCC ACCAACCGNA ACCAACCTT CTACATGCC TTAACCCAG GACCC

SEQ ID NO:1761: (Length of Sequence = 378 Nucleotides)

CCCACCAGAG CATTTCAACA AGGCTTACCA CACAGGCCCC AGTACCTTTC TACTCTACAA TGAGGCTCAG AAGCTCAGTG
 TACCACCCCA TCCCCAGGAG GCCCCTTAG ACCAGAAATC CCAAGTCCAT TAGCTACAGG CTGATATTCA GGGACATCGG
 TGTAACAACA GAAGTGGGAT ATGAACATA TCCTGATTT TTTTTCTTT TTTTTTTTT TTTTGTAGAC TAAGTCTCAC
 TCTGTCCCC CAGGCTGGAG TGCAATGGCG CGATCTTGGC TCACTGCAAC CTCGACTCT CAGGTTCAG AGATTCTCTT
 GCCTCAGCCT CTTAACTGGG GTAAACAGACA CTTGCTACCA TGCCCGGCTC ATTTTTTT

SEQ ID NO:1762: (Length of Sequence = 351 Nucleotides)

TGATAAATAA AGAAGTTCAA AAAAATCTTT TAATAGAAGC TATAAATAG CAGATAAGCT AAGTCATTCT CATAAACAC
 CATTGTGAT TTGAATGCGT GCATTGTGGC CTGTACTTT TAACTAGTCT CACTAATTTA TAGTTATATA TGATGTAGAT
 CTAGATTGTG ATGTACACTA AGTGGGTGA TCCYGAGATC AAGCTATGAT TGCTGCTTGC GTAAAGTGT CCYTTTGGGA
 AATAAATAAT CTTTCATATC GTTAACTTT GGTATAATTG GTTATTTATG CAATGTATTG TTGTGGTTGT CAACTCAAGA
 TTGTATTCTC ATCTGGGGAC ATTATGAATC T

SEQ ID NO:1763: (Length of Sequence = 157 Nucleotides)

GTGTWFACTT AGTGTGTAAA GTGAACAAGA AAAGCAGCAT AATAAAGGAG CTGTGTTTTT ATCAGAGGAG CCTTCCTTCT
 GAGTTTTTAC ATAAGTTGAT GCCTTCACTG CACTTTGAA TACAGTGCTT TGAATGTGA AACACTTGAA TAAAATG

SEQ ID NO:1764: (Length of Sequence = 321 Nucleotides)

GCTCCTCTGC CTTCACCTCC TCCAGCTCT NACCCTTGG CAACGCACCA CTGCCAGTTC CTCTGGGGCT CTCAGAATCA
 CTGGAGTACT TCTGCAGCTC TCTTGGATGA CCTAGGGGTG CAGCAACAGG CACAAAGCTC TCCTCCAGGT CCTGGATTTT
 TTTATTTCTT CCGTTCCTTC TCCTTGGTGT ATTTCCTG TGAGNGTCTG ACTCTATCAC TTTCAAAGCT GTGCTGTGGA
 TTTGGGTCTT TAGATGAGGC TTCATGCCCT GGNATAAGCA AAGGAGCTG ATACAGAGTT GGCCTGCAGG GAGCAGCTTT
 T

SEQ ID NO:1765: (Length of Sequence = 420 Nucleotides)

TCAAGCCTGT NATCCTAGCA CTTTGGGAGG CCGAGGTAGG CAGATCACT GAGGTTGGGA GTTCGGGACC AGCCTGCCCA
 GCGGGGAGAA AACCCGTCTC TACAAAAAAT TTTAAACTT AGCCAGGCGT GGTGGCGCAT GCTGCAGTTC CAGCTACTCG

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AAATTTAACT TCAACAAGCT GGTGATGCC AACTACCCAT TCATCAACAT TCGGTCAAGT GGTGTGGTTC CTCAGAGTGC
 ACCACCAGTG CCAACAGCCT CTTCCCGGTT CCATTTCCCA CCTCTGGACA CCCATTCTCC AACCAATGAT GTGCAGCCGG
 GACGGTCTC TGCTAGCTCC CTAAGTCTT CTGGCCAGGA GTCCAGTAAT GGTACTGATA GAAAGACTGA GCTTTTCAGAG
 CTGGAGGATG GCTCAGCTGC TGAAGTGGGC CGGGGTGTGG ATCCCGTGTG CTCCAGGAAT GCCATTGGTG GAGGAGGGAT
 TGGCCATCAG AAACGCAAGC CTGACATAAT GCTTCCTCTG TTTGCTAGGC CAGGGATGTA CCTGACCCC ACAGTCCTTC
 GT

SEQ ID NO:1754: (Length of Sequence = 397 Nucleotides)

CAGTGGCATC TATGGCTCTA AAATGGAAAG GAGGAGTCCT GGATTCAGGC TACTGACTTA CTCTGTGAAT TTACACATAA
 CTTCCCTTGA GCCACAGATT TAGCATTCTA CCAGTCACCT GATATTTCTG AGCAGCCACA ATATTTTAAA ACTATATTTA
 AATCTGAATT TGGATTTAGC AGAATTTTAT TTTTCCATT TCTATTTCT ATGGTCACTA AATTGAAATT ACAACCATG
 TAAAATTGA TATCATTAAT TATGTAGGAC TTTATCCAGT TTCAAAGTAA AGATGTCTCT AATGTAATTA ATTGTNATTT
 TCACTGATGA GACTGAAATA CAATCAGTCT GTATTGTGTG GTGCGTATGT ATCAGTGGTA AGAGGCTATG ATTAGAC

SEQ ID NO:1755: (Length of Sequence = 353 Nucleotides)

GAATTACTCT GTTGTTCACC TTTTGCTTTT TGCAGTGTG GINCTCTAT CTGTATTTTG AGCTTAGTGC TAGGACTGAG
 AGGCTGCACC ATAGGGAATG TATGGGAGAT GGTGAGGGGT GCCAGTNAAG GGTGCGTGA GGAGAGGCCT GGGCTCCTCT
 ACTGGATCTA CACTCTGTCC CAGGTTTTTA GATCCCACTG AGCCAGCTG ACTGAAAACA AGGACAGTCA GGGTGAACT
 TCTTTTGCCA GAAGTGTGGC CTGAGTTGAA TTTCTGGGAG GATGACGAG ATGTCTGCTG CAGAGCTGGG CTGAGAGTTC
 TNCATCTAG CTCTGACTTA GTTCAAGGGG CCT

SEQ ID NO:1756: (Length of Sequence = 184 Nucleotides)

TGGGCTCGGA GCATCGAGCT GGACATGCGC ACCATTGCCA CTGCACTGGA ATATGTCTAC AAAGGGCAGC TGCAGTCTGC
 CCTTCTTAG CCCCTGTTC CTCCCCAAC CCTATCCCTC CTACCTCACC CGCAGGGGNA AGGAGGGAGG CTGACAAGCT
 TTGAATAAAA CACAAGCCTC CGTT

SEQ ID NO:1757: (Length of Sequence = 425 Nucleotides)

ATTACAGGCG TGANCAACAC ACCTGAGCTA ACTTCCTGGC TTTTCAATCA AACCATCTTT GTCACCTCCT GTCCCCACCT
 GAAGTCAGAA AGCCTGAAGA GAAGACGGCT CTATTGCCNC AGCTGGAGTG TGGTGGCACA ATNTCAGCTC ACTGCAACCT
 CTGCTCTCTG GGTTCAGGCG ATTCTCTGT CTCAGTCTCC TGAGTAGCTG GGATTACAGG TATGCACCAC CACGCCCTGC
 TACTTTTTCG TATTTTGTAGT AGTAGAGATG GGGTTTCACC ATGTTGGCCA CGCTGGTCTC TATCTCTGA CCTCGTGATC
 CACCTGCCTC AGCCTCCCAA AGCGCTAGGA TTACAGGCGT GTAAGCCACC ATGCCCCGCC AATTTTGCCA GTTTTTATTG
 GGCTATTCCT TATTGAGATC TAGGG

SEQ ID NO:1758: (Length of Sequence = 407 Nucleotides)

AGGAAGGCAT AAGCTAAGCA TCCTTCTAAC CAGTTCCCAA AGTCCCCTCT GCCTCCATGT ACCAGCTGAT CGCAGAGCTG
 GACTGGGGCA GGCTGGGCTT CCAGGAAATT CCTGAAGTTC TGAAACAGCT TCCCCTCTAG AGAAGCCCAC CCAATGTGTT
 TTTTAGTGAC AGGAAGAAAG GAGGGAAGAG CTGATGTGGT GTGGCCTGCC CATATCATAC AACCCACCA GGAGCAGGGC
 AGTTCCCAAG GTGGGTGCCC GTAGATCTGG GAGGCCAGGC TGGCATGATT CTTGTGAAGA ACTGTGCCTG TNCGTGAGG
 GAGAGGCCTG AGCCCTCTCA GAAGCAGGGA CAGCCACAAC TGAAGAGCAC GCCAAGCTGA GGCAGCAGCA GCAGCTGGGG
 GAGCAGT

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TTTACACGNC AGTAACCCCTT CAAGTTCTGC CACCCTGTGT GGGGGTAATG CGTGCAGCT AAAAATATGG GTTTTACGNA
ACANCCATGG CCTAAGGGGA TTTCTCATAG G

SEQ ID NO:1748: (Length of Sequence = 428 Nucleotides)

AATAGCTTCA GCTGATTGGG TGAGTCCTAT TCATGTTATA AAAGGTACTC TGCCTTCCTT AACATTCCAT AAATCTTAAT
CACATCTGCA AATACCTTCA CAGCAACATC TAGACTAGTG TTTGACCCAA CAACTGGGCA CAATAGTTTA GCCAGTTTA
CACATAAAAC ATCATCACAC TATGCTTCTC TTCTGTGTTT TTTGTTACCA CGTATCTGTT CCATGTGTTT TNCCTTGTAT
ATATCCTATC CTGTCATATC TCTCCTATGG TTTTGIGGAA ACTATAAGCC TTTGGGGGG TAAAACACTA TATCTTTGTT
CAATTGTTAA TACATCGNAT AGCATATCAT GCCTGGGGGC ATTGGTTAAA CCCCCATTT AAATACAGCT NGGCAGCAGG
ATTTTAGGCA TTCCGTCATG GTGTGCCA

SEQ ID NO:1749: (Length of Sequence = 478 Nucleotides)

GGTTTCACCA TGTTGGCCAG GTTGGTCTCA AACTCCTGAC CTCAGGTGAT CCACCTCAGC CTCCTAAAGT GCTGGGATTA
AAGGGGTGAG CACNCACACT CACACCTGGC CCTCAACCAT CTCCTTCACC TTCTGCTCAT GACAGTTTAC TAGAATTTTT
TTCCCTTGAG ACTGAATGTT AAGTCAAAAA CAATAAAAAA TTGCTAATCA TTACTATGAC TCCAGAGCTA CTGTCTTCTT
TAAATATTCC TGAANTTATA AAATATAAAG CCAAAGCAAT GAATTTCTAA TGGTGGAAAT GTAGACACTG TGGGCCCCCT
GGCTGTGTTA TTTTCAGATG GGGCAAGGGG ATATTCCTAA CCTATTTTAA AAATCATGCC AGCCTAGATA ACTATGTGAA
AAATATATGG GTGTCTTAGC AAAACTATTA CCTAGCAGCC CTTTGGCAGT TTTACATTAA AAATCCCTTT ATTAGGTT

SEQ ID NO:1750: (Length of Sequence = 439 Nucleotides)

GACATTTTAT TTCCAGGTTG GCACGTGTAT AAGGCACAGG GGCAATGGC TTTGGGGTCC TGGAAGTGA AATGGAGACA
GGTGTGTCTC AGGTGTCCCT GCCTCCACCA CCCCCTAAGT GCACCTGAGA CAGGACCAAT GTTGGTGGTT CCAGCCCAGG
GTCTGAAGG GTNCCACTGG CTCTAGGGGA GAGCCATGGG GACAGCTCCC CAGGCGGGAC CCTCTACTCT CCAGCTACCC
AGGAGGGACC CTNCTCTCT AGGGGGCGAG GCCAGCTCCA AAGTGCTTNG TGGTCCCCA GGCTTAAGGG ACCAGNCTGC
CAGGGAGGGC TNGGNTCANA GAGAGAATAG TAAGATNAGA CGAGGAGAAG CACCCCACTA GCACGGCGAT TGGANAACAC
TNTCGGCGGT ACTCGTCATG TGGGTAATTT GCCAANTTC

SEQ ID NO:1751: (Length of Sequence = 347 Nucleotides)

CTCTATTACT TATGATTACA CCATGGCAAT ATTCTTTTTT CACCAGGAGC TTTGGACCTG CGCAGGTTGT GGCATGTAAT
CACCGGAGC ATGTAGTCAT CTGTAGAAAT CACAGGCACA CTCATGTTTG CTCGGAAGG AATCTGTTTT CCACAATGAC
TCCCCCAGC TAATGTACAC ACTGGCATT TGCATGCCTT CCTCACACAT GGGGCACCAG CCTTGCTTCA GAACCAACCA
AACTCCACAG AGGCCCTTAA ATATGGGCTA GGGACAGATT TTCTTTAAGA AAGAGTTAAG GAGCAGCTT ACAAAGGGAC
AAGGCAAATT CCACAAGTCA GGCAGCA

SEQ ID NO:1752: (Length of Sequence = 297 Nucleotides)

GGATATTCTA GCCATACAGA TTCAATGGAA CAGAGAAGAG AAAGGAGGTT CCATTGGCAC CATAGTGAGC CATTCATTG
CCCAGGGAG NNGGTGGGGG CTAAGGGGCT AGGTTTGGTC CCATGGCTAC ATTAAATGCT TGGCATGACT CCAGGGCTNC
TCTAGTTAGT GGCTCCAGCA CAGTATGAGT TAGGTGAGTT AGGTGTAGGA GTTTGGGGAC AAGGAAAAG GGAGGAGGGG
TCCCTAGAGG CTNGGTGCC ATTACATAGA CTCAATTGG TCAATGCGCT GCTTTAG

SEQ ID NO:1753: (Length of Sequence = 402 Nucleotides)

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TAAATTGTTA ATAGAARTTT CCAGTTTTCT TTAGTCTCTG GCTACTCCAA GTACTGGTTG CTGTGAATGA CCTTTTCATG
AG

SEQ ID NO:1742: (Length of Sequence = 322 Nucleotides)

CCCCCAGCC AGGAAAAAAA AAAAAAGCTT TGAGGAATGA GAGAGGGTGA GATGGGTGGA AGAAGGTGCT GGGCAGCCAC
GGGCGCCACG CCTCANTGGC CCCAATTGCC GAAGCCGATC TCCTGCTTGT ATCTGTTAGT GAGGATGTTG GCTTTGCCCG
TNAGTTTGA GAGCACAGTG TGCAGCCCGC GCAGGTGGTA GTGGAACINC TGTTCAGGT CTTCTTCGCC GCGTCCGAA
CCCTCCAAGT GGGCCAGGTC CACCAGGATG TCCTTGGGAC TTCCAGGCAC TGCCCTNCTC GNTCCCAAGC CGGTNGGAGG
CG

SEQ ID NO:1743: (Length of Sequence = 250 Nucleotides)

ATGGGTAGGG GGCCAACGCA GTCACGCGG TCCGAGTCA CAGTCCAGCC ACTGACCGCA GCAGCGCCCT TGCCTAGAGC
CGCTTGCAGC GAGAACAATG AATTGCCAAC GAGCAGGAGA GTCTCAAGGC GCAAGAGGAG GCCAGGGCTC GACCCACAGA
GCACCCINAG CCATCGCGAG TTTCGGGGCG CCAAGGCCAG GAGAAGCCGG CCATCCCGCA GGNCCGNGTC TTTCAGCGAG
ACGNGAGTTT

SEQ ID NO:1744: (Length of Sequence = 247 Nucleotides)

GATGATTGAG TGTTCCTTTA AAAATAAAAA CCCCACAAAA AAGCCAGAAC ACCCTACCCA ACCCAGCCCA GTGTAACAGG
TTAGCCATTA ACACAGNATA AAGAWGGTCC CAGCCACACA CGTCATTACT CGGCAGAGGG TGTCCAGKCT GGTGKCCGA
CGTCACAGTG GATGGCCCTG CGTGGCTGGG RCACAGACAG GNGCAGGCA TGGCACCTTT CGNCACGAG AGCAAGCATA
GGCTGTA

SEQ ID NO:1745: (Length of Sequence = 379 Nucleotides)

TTCTAAACCA GTTAATAAAT TCATTCCACA AGTATTTACT GATTACCTGC TTGTGCCAGG GACTATTCTC AGGCTGAAGA
AGGTGGGAGG GGAGGGCGGA ACCTGAGGAG CCACCTGAGC CAGCTTTATA TTTCAACCAT GGCTGGCCCA TCTGAGAGCA
TCTCCCCACT CTCGCCAACC TATCGGGGCA TAGCCGAGG ATGCCCCAG GCGGCCAGG TTAGATGCGT CCCTTTGGCT
TGTCACTGAT GACATACACC TTAGCTGCTT AGCTGGTGCT NNGCCTGAGG GCAGGGCAGG AAAATCAGAA TAGCATTGCT
TTTCTCTGGG GCAAAAATGG GAAAGTTCAG CGGNGNCAG CAGGAATCAA GTGGGCATT

SEQ ID NO:1746: (Length of Sequence = 472 Nucleotides)

TTTCATGCTGT CCCTTCATTG AATTTTAGAA TGAITGAAGA TAGTGGGAAA AGAGGAAATA CCATGGCAGA AAGAAGACAG
CTGTTTGAG AGATGAGGGC TCAAGATCTG GNTCGCATCC GACTCTCCAC CTACAGAACA GCATGCAAGC TTAGGTTTGT
TCAGAAGAAA TGCAATTTGC ACCTGGTGGG CATATGGAAT GTCATAGAAG CATTGCGGGA AAATGCTCTG AACAACTGG
ACCCAAACAC TGAATCAAC GTGTCCCGCT TAGAGGCTGT GCTCTCCACT ATTTTITACC CAGCTCAACA AACGGGNTGN
CAACCACTTC ACCAAAATCC ATGTGGAGCA GTCCATCAGN CTNCTNCTTA ACTNCTGCT TGCAGCGTTT TGATNCCGGA
AGGCCATGGT AAAATTTTCA GTATTGCTT GTCAAAAANG GGTTTTAGGC NCCATTGTG TGGGAGGGGA AG

SEQ ID NO:1747: (Length of Sequence = 351 Nucleotides)

AGGATCAGAA TACTTTAATA AGATACCAAT GTCAAAATAC ATTTCCCTAT AAAGTTAAGC TCCCATACAG TTATAATGTT
GTCAGTAGGA ATTCGACAAT ATAATAACGT TCATGAAATC GTTACGTTGA CAGGTAGGGT TAATATGAAG CTTGGAATAT
TTTCCAGTGT TTTAGTAAAA CTGCAAGGGT AAAATGCCCT TAATGCCAGG GCAACACACA CAGGNAATCA AATACCAGCA

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GCTGGGCAGA GCTCTAACA GGGGCAGGG CTCCTCTGCC AGCCTGTGGG CATGGCAGTC ATTCTTGAA GGGGCAGGAC
CTCCGGCCTT GTCCATTTCG GGGGGAA

SEQ ID NO:1736: (Length of Sequence = 356 Nucleotides)

GACACAGGGA GGGGAACAAC ACACACTGGG GCCTGTGGG GAATGGGGG TGAGGGGAGG GAGAGCATCA GGACAAATAG
CTAATGCATG TGGGGCTTAA AACCTAGATG ATGGGCTGGG CGTGGTGGTT CACGCCTATA ATCCCAGCAC TTGGGGAGGG
TGAGGGGGC GGWTCAGAG GTCAGGAGAT CAAGACCATC CTGGCCAACA TGGTGAAACC CCGCTCTAC TAAAAATACA
AAAATTAGCC AGGCATGGTG GTGGTGGGT GTAATCCAG CTACTCAAGA GCCINAGGCA GGAGAATCAC GTGAACCTGG
GAATCGGAGG TTGCAGTGAG CCAAGATCAT GCCACT

SEQ ID NO:1737: (Length of Sequence = 324 Nucleotides)

TGTTTTCTAA TGATTTTTAA TTTTTCAGAG GAAAAATAAT TCAAGAAATA AAACCTAATT CCCCTGAGTC CTATTGAAAT
TAAATATIGA AAAACAATGA ATGAATGATG CATTCCTAAT AATGGACTGT AAGAACTGA TATAATGGAC TTCATTCTAC
AATTCGGTTT CTATTGTCT TACACATGCT CCTCGAAGCT AAACATTTTA GGACCTTAAC ACCATTTCCT TAGTACAATT
ACTAAAAGAA AGCTTTGGAT AATATAATAT CAGGGAAGAT AGTACAACAT AGTGAAGGAT GACATAGGAG AGATGTGAGG
AGCA

SEQ ID NO:1738: (Length of Sequence = 316 Nucleotides)

GGCACCCCTGG GCATGTCCAG CCTGGAGCAG CTGGAGCAGA ACTTGGCAGC AACAGAGGAA GGGCCCCCTGG AGCCGGCTGT
CGTGGATGCC TTTAATCAAG CCTGGCATTG GGTGCTCAC GAATGTCCA ACTACTCCG CTAGGCCCAT CATGGCTCAG
GCTGCCAAG GCTTTTNGT CACCTTTTT GTTCTCAC ACTGACCAGT CTGGCCTTA AGCTGACTTA GAAGGGTTT
TCTGAATTGT CTAGATCCAT GCATTATTT TCTAGCTTC TGCCCTGCTC CCTATTCACT TTACACTGTG AAAGGT

SEQ ID NO:1739: (Length of Sequence = 398 Nucleotides)

CAAAAACCAT CTCAGGATAC TGAGAAGCCT CTGGAACCTG TGAGTACTGT TCAGGTAGAG CCTGCAGTTA AGACTGTAAA
CCAACAGACT ATGGCAGCAC CAGTAGTCAA AGAAGAAAA CAACCTGAGA AAGTCATCAG CAAAGACCTT GTTATAGAGA
GGCCTGACC AGATTCAAGA CCAGCAGTTA AAAAAGAATC AACTTTGCTT CCCAGGACCT AITGGAAAGA AGCTAGAGAG
AGAGATTGGT TTCCAGATCA AGGATACAGA GGTGAGGCC GAGGTGAATA TTAATCCAGA GGTGCAAGC TATAGAGGTT
CTTTATGGGA GGGGCGTGGC AGNGGGTGG TAGGGGGACA CACTTCGAGA TTATCTCAG TATANGGGC AATAAGCC

SEQ ID NO:1740: (Length of Sequence = 376 Nucleotides)

GAATAAATTC GCAAACTATG CATCTGACAG AGGACTAATA CCCAGAATCT ATAAGGAACT CAAAAATCA GGAAGAAAA
AAATCCCATC AAAAGTGGGC TAAGGACATG ANTAGACAAT TTCAAAAAGA AGATATGCAA ATGGCCAGAA AGCATATGAA
AAAATACTCA ACATCCCTAA TTATTGGGGA AATGCAAATC GAAACCACAA TGCAATACCA CTTTACTCCT GCAAGAATGG
CCATAATTTA AAATCAAAA AATAATAGAT GTTGGGTGG GATGTGTTGA AAAGGGAACC ACTTTTACAC TGCTAGTGGG
GATGNTAAAC TACTTCGGCT ACTATAGNAA ANCAGGATGG GNGGATTCTT TAAAAG

SEQ ID NO:1741: (Length of Sequence = 322 Nucleotides)

CAAATGCAA AATCAAGACT TGTCATAAAN TGATGTCCA TAGCCTATAC TGTTTAAAT ACINTAACTN TATAGTAAAT
CTTGATGTTT AATACAGCAA ATGTTAAACC AAGCTTTTAC TACAGAAATA AACAGAAAT TATAGGCGCT CATTATCCTT
TTAGACAAAG TTGTATTTC TTTGCTATR TTTTGTGTTA GGNTTTGTGC AACTATTTCA CAAACAGGNA CAAWRATAT

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SEQ ID NO:1729: (Length of Sequence = 301 Nucleotides)

GGAAGTTAAA GTATTTATTG ATGTGTTTAA ACTGTGTACA TTCTCCACAG ATCATATTAA GNGTTTTKTA GKGGAAGTTT
 AATCTGTGCA TAGTGGGTAG YGACATGAWT AGGGTCAAAG GGGAGGYAAA AGGAAAAAAA CAAAACAAA ACAGTCACAG
 GAAAWTAAAA ATACACCMCA GGTACCAGA ACCTTCAGGT TTAAATAAA ANGNAAGNAA AAGCAGAACC AGTGAGCATC
 GGCATCAACC TGTACAAGCA TTACAAAAGG CTCCTGTGAC GGAAACACAA TTGTTCAAAG G

SEQ ID NO:1730: (Length of Sequence = 312 Nucleotides)

GACGRACGCT CTTGCCACGC CTTGAGGTG TACACATGAT GTNTCTATG CATTACCCCT GCCCCCAGC CCGCCCTGCA
 GAGGACAAGA TGGGTGGCCC CGGCTCCCTT TCCCTTAACC GCCCCTGCCC GCTGTGCAGC CGTGTGCGTT GCGTGTGTT
 TCTGTGTAC TGGCGTGTCA CGTGATGTAG CCGTGTGTC TGACATGAGC CCGTGCCCC TTCTCTGTTT CTCGTTGGT
 TTCTAGAGCT CTCCTCCCTC CTTCTCAGA GGGACAGGA CTCCTGGGT CTGGCTCGG CCCAGAGCCA GG

SEQ ID NO:1731: (Length of Sequence = 392 Nucleotides)

ATCGGCTATG GGTCCGGTG CGTGACAGAG GAGTGCCCGC TGGCAGTCAT CGCTGTGGTG GTTCAGTCCA TCGTGGGCTG
 CGTCATCGAC TCCTTCATGA TTGGCACCAT CATGGCCAAG ATKGCGCGC CCAAGAAGCG GGCGCAGACG TTGCTGTCA
 GCCACCAGC GGTATTTTCG GTGCGGACG GCAAGCTCTG CTTATGTGG CGGTGGGCA ACCTGCGCAA GAGCCACATT
 GTGGAGGCC ACGTGGGGC CCAGCTCATC AAGCCCTACA TGACCCAGGA GGGCGAGTAC CTKNCCCTGG ACCAGCGGGA
 CCTCAACGTG GGCTATGACA TCGCCTTGA CCGCATCTC CTGGTGTGC CCATCATCAT TTTCACGAG AT

SEQ ID NO:1732: (Length of Sequence = 352 Nucleotides)

GTACCTAGTA CCTTAGATAA AGGGAATGT GTGATTCTTA ATGAGCTTTA AAAGGAAACA ACTTCTTTTT TTTTTTTTTT
 TTTTGTAGAC GGAGTTCAT TTTTGTCCCC CAGGCTGGAG TGCAGTGGCG CGATCTCTGC TCACTGCAAG CTCGCTCTC
 CGGGTTCACG CCAATCTCCT GCCTCAGCCT CCCGAGTAGC TGGGACTACA GGCTCCACC ACCACGNTCG GCTAATTTTT
 TGTATTTTWA GTAGAGACGG GGTTCACCG TGGTTAGCCA GGATGGTGTG GATCTCCTGA CCTCGGTGAT CCACCCACCT
 CGGNTCCAA AAGTGCTGGG GATTACAGGC GT

SEQ ID NO:1733: (Length of Sequence = 321 Nucleotides)

TTTTTGTGT GTTTGTTGT TTGTTGCAG AGTCTGCTC TTGATCTATC TCCCAGGCTG AAGTACAGTA GTGTGATCTC
 GGCTGTCTG ACCCTCTACC TCCCAGGTC AAGCAATTCT CATACCTCAG CCTCCTGAGT AGCTAGAACC ATAGGCACAC
 GCCACCATAC CTGCTAACTT TNCIATTTTT AGCAGAGACT GGATTTTGCC ATGTTGGCCA GGCTGGTCTC GAACTCCTGG
 CCGCAACTGG ATCTGCCCAA CTCAGCCTC CAAAGTGCTG GGATTACAGG CATAAGCCAT TCATGTGCGG TTKTCAACT
 G

SEQ ID NO:1734: (Length of Sequence = 208 Nucleotides)

AAGTCAACGT ATCTATTTTT ATTATGAAAC ATTAAATTTT GACACATTGC CTCATTGCT TTTTAAAT CTATTATCTG
 ACTTAAACCT ATTCAGCAA AATGCCAATA AATTATATTA ATCATACTTT GGGTCTTTTT AAAACTAGGA ACATAATATG
 TTTTATGATA AACAATAATA CTAAATCTGA GTTGTATGAA CTGTTAAC

SEQ ID NO:1735: (Length of Sequence = 347 Nucleotides)

TCTATTACCT GTACAGTATG GTTTATACGT TGGTGAGTTT CTAAGGGGGA AGCCGGCCAG GGAGCGAGCC CAGAACGGAC
 CGGACGCTG TNCACCCCA GCCCTGCCCC TTGGCCGAG AGGCTCAGC CCTGGGGAGG GAGGGGGCAC TGGTGCCCCC
 AGCCTCTCCA ACCCCCAAAC TGCTGCTGCG GGAACCCCC CCCACCCGC CTCAGAGCC CTCCCCCTTG GACTAGAGCG

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TGTTTTTAAA AATGAGAAAA TTTGGAGAGA GAATACTATT ATGTCAACGG TACAAGACTC TGAATCTTGA AGATGTAGAT
GGATATAATA TTTAGACTTT ATATACACCC ATAGATATGT ATTTATATAT GCATACGTTT TGTATAAATT TACAATTGAC
TTTTTGTATT CTCCTTNCIG TCATTACAAG AATGAGATGG AAACCAAAAT AGTTGTNCCA TCCTCTTACC CAAAGAGGGA
TACTGAAAAG TCOGGTATGT GCATGCACCT GTTCTCTGG GGTCAAATCT G

SEQ ID NO:1723: (Length of Sequence = 369 Nucleotides)

GATTGCCCGC TCCCTOGATT CCTCCTGTT GTCTCCAGAA GCTGCTGTGG GCTTGCTAAA AGGGACAGCA CTGTCTCTAG
CCOGATTACC TTTGGATAAG ATTACCGAAT GTCTTAGTGA ACTATGTTCT GTTCAGGTTA TGGCATTGAA AAAGCTGTTG
TCTCAAGAGC CCAGCAATGG CATATCCTCA GATCCACAG TGTTCTTGA TCGCCTTGA GTGATATTA GGCATACCAA
TCCCATGTG GAAAAAGGAC AGACTCATCC GTGTCAGAAA GTCATACAGG AAATATNGCC AGTTTTTATC CGAGGACTCT
AAAATAAGCA CCGAGCTGNA TAATCGGATT GTAGAGCGTT GTTTCAGG

SEQ ID NO:1724: (Length of Sequence = 231 Nucleotides)

ATGTATTGTT AGTTGATTC CTTCAAATTT TATACATATT TACTTTCTGT TAAAGAGAAA AGGATAAAAT GGTATAAAAA
AAGATAAAGC TATTAATTAA GCAAGAGAGA GAAGATAAAT GGATATTTTC CTTGTGTGAG GCTAAGACAG AWGCAAATCT
CGTTANGAAA AATGCCACCC ACACAACAGG AANTTTATCC AAAACAAAAC AAAAGCAGTT ATAGANCCCC T

SEQ ID NO:1725: (Length of Sequence = 317 Nucleotides)

GTGCAGGGTA GGGTACATAT GGCTCTGTCA GAAGAATACC ATGATTTAAG GGAAGAAAGT ACACAAGGTA CATGGAGGGT
ACACAGGGAA AGTACATTA TAAACATGGA CGTGTGCAAA TAGGAAAGAC ATGACTCAGC ATGCTAGACA AATTGCACAT
GCCTACCCAA ACACGCTTAA GGGCAGACCC ATGACCATGA GAGGGGCACA CGTAGCTGTG AATGCAGGGC ACCGAGAGC
ACATGTTACT KAACATGAAG AAAGCATACG GGAAAAGCGT GTKTACACAT GNGCATGTTT AGTGGGGCAC ACCCAGG

SEQ ID NO:1726: (Length of Sequence = 282 Nucleotides)

CTCTTGAACC AGATGAGCAG CCACCGGAAA CAGAAGCAGA GAGAGCCGGA GTCTTGGGAA TCCAGGAAGT CGCAGAGCAG
GGGGTCCAGC ACCCTCAGGA GCAGCAGCAG TCGCCOGAKT TCGCGCTTCA TGGTCTCCTG GCTCTCTTCA AAGTTCCCTT
GCAAGAGCTC CATGAAGCCA CAGAAACACC AGAAAGCATC CACCTCGTTC TGAATGACGT AGAGGATCGG GGAGAGAAGA
TCACTCATGC CCTGGACGTA GCGAGGTCG AAGTGATACA TT

SEQ ID NO:1727: (Length of Sequence = 285 Nucleotides)

GAGTATTGAT TTCAGGCAGG ACCCAGGTCC CAAAATGTTA GAAACAGTTA TCCTTTTTC CTCTGAGTTC GTTATTCTCT
GGGGCCCCAG TATCOGTGGC TTAACAACCC GGCTGGATAG AAGGCACCTC TTTCCCCAG TTCCAACAAG ATCCAGAGC
TGCTTCTCAT TGGCTGTGCC CTGAGTCAGT CACACTGGAC CGGAAGGTGA AAGGCCCTCA TTGGCCAGNC CGAGTCATG
TGCCACCCC TGGGGATCCA GCTGTGGGNC TNCITTAACA GCATT

SEQ ID NO:1728: (Length of Sequence = 394 Nucleotides)

TTTTTTTGAT GAGGAGATAT AGCAAAGGGT CATTTGCCCC TCCTTCAGAA AACTTTTCTC CAAATCTCCT TTAAACATAC
TGCCTTATCT TTCCCTCCAT AACTCCACCA GTCTCTCCAC ATCCCCCTCC AAATCTCTGT ATACATAGGC AAGAGAGGGC
GATTCCCAGC ACAAGTCTAG TCCTGGGCGA AACTTCCATC TCTTCTCTCG CATACCTCCT GTCTGGGTAT GGGGATAAGG
GAGAGTATGG GATTTTGTTC TCCATTACAT GCTTTTTCAA AATTTCTGTA ATATGTGGCA CTTATAAAT CAGAACAGAC
AAAATGATAT CGGGTAAAC ATGCAACTGA GAGCAATTG GGGAAAATC CTCAGGNCAC AAAATGTATT ACTG

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GTGCCGGGCA CCCATGTCTC GGTAGCACTG GGTGACAGCG CCTGCGGTGG TCAAGTCCCG GTATTCCCGG TACATGTTGT
GGGTGCCGCT CCGGGAGTCA TAGCGCAGCA AGATCCCGAA GTTCTTCAAC C

SEQ ID NO:1716: (Length of Sequence = 265 Nucleotides)

GTGCAGAATC TGCTCCTGGA CACCCACAGG GGGCTGCTGT ATGCGGCCTC ANANTCGGGC GTAGTCCAGG NGCCCATGGC
CAACTGCAGC CTGTACAGGA GCTGTGGGGA CTGCCTCTC GCCCGAACC CCTACTGTGC TTKGAGCGGC TCCAGCTGCA
AGCACGTCAG CCTCTACCAG CCTCAGCTTG CCACCAGGGC GTGGATCCAG GACATTGAGG GAGCCAGCGN CAAGGACCTT
TNCAGCGCGT CTTGCGTTGT TTCCC

SEQ ID NO:1717: (Length of Sequence = 350 Nucleotides)

CAGCCCCCGC AGCCCTCTGG CCCCCTCCAT CTCTTGTCG TTCCACCCA CCCCCTCCT CGGCCCCGAGC CTTTCCCGG
TGGTGTCAG GNTACTCCC ACTAGGGACT CTGCGCTAAT TACCTGAGCG ACCAGGACTA CATTTCCTAA GAGGCTCTGC
TCCAGGAGTC CAGGAAAGAC GAGGCACCTT GGCCGCGGG CCTGCTGGGA CTGTAGTTG CCTAGACAGG GCACCACCT
GCACTTCCGG ACCCGCGCTG GAGGCGCCGT GAGGTTTGGT GTCTCGAAGC AGCAATTAAA AAGCAAGAGG ACTTCATGAC
CACCATGGAC GSCAATTAGG AGAAGATCAA

SEQ ID NO:1718: (Length of Sequence = 379 Nucleotides)

GACATGGAGA CTCACATGGC TGCAGAACAC TGTCAGGTGA CTGCAAATG TAACAAGAAG TTGGAGAAGA GGCTGTAAA
GAAGCATGAG GAGACTGAGT GCCCTTTGCG GCTTGCTGTC TGCCAGCACT GTGATTIAGA ACTTTCCATT CTCAACTGA
AGGAACATGA AGATTATTGT GGTGCCCGGA CGGAACATG TGGCAACTGT GGTGCAATG TCCTTGTAAG AGATCTGAAG
ACTCACCTG AAGTTTGTGG GAGAGAGGGG GAGGAAAAGA GAAATGAGGT TGCCATACCT CCTAATGCAT ATGGATGAAT
CTTNGGTCA GGATGGAATC TGGATTGCAT CCAACTCCT CAGACAAATT GAGGGCTCT

SEQ ID NO:1719: (Length of Sequence = 197 Nucleotides)

CCTATATTG TTTAATTIAT TTAAGACCAC CTCCTTACAA CTTCAGAGA GAAATACAA AACAAGAAAC AGACTTGGTT
TCAAATGCAT AACCAGGTGC TGGAGTTTAA AGCATTACTG ATAACATGT TACAGAAGAA TGGCAGCTTA CTCCAGGGCA
CTTCAGTATT CTGAGGAAT AAACATGATT TCGGAAG

SEQ ID NO:1720: (Length of Sequence = 203 Nucleotides)

GAGGGCGGG CAGAGGGAGC ATGACGGGGA GAGTGAGGAG GAAAGAGGAA AGGAAGGCCA GGGTGGGAGG AAGGATCANC
TAAATCTGAG GGAAGAAGAA GGAAAGGAGA GGGCCTATTT CATAGCAGAT GCAAATRAAG GGNCTTGGGG CTAKTCAGGA
AGAAAGGGAA AGGGAAGGAA GGCAAGAGAG AGGGGTGAAG GGA

SEQ ID NO:1721: (Length of Sequence = 326 Nucleotides)

GGTGCAGCGA TGTTTAATGG CAATTGTTAT AAACCAAGCC CATGCACAAG TAGAAAGTGC CGTGGAGCC GGCAGGAGGC
CCCCGCCGCG NTAGAGAACC ACAAGCCCGG CCGTGCAGCC CTCCCGCGG CGCCTTAAAT AGATTCTTCA CTATACTCTG
TATGTTACAG TATGTACAAG ACCCTTCCCC TCGGGGGACG GGGCGGACTN CGCAACNGT TCCTATGTAC ACCACCTCCC
CTTTCGGCCC TGAGGTCAGT GGCCAGAGTC GGGTGATGGG GTAAGANAGG GCCAGAGAGG GAGGAAACAG ACGCAAACAT
GCGGAG

SEQ ID NO:1722: (Length of Sequence = 291 Nucleotides)

SEQ ID NO:1709: (Length of Sequence = 404 Nucleotides)

TTTGTCCTAT GTAGAATGTC CTATAGTAAG AAAACCCAGT AGAGAAAGTG GTTTTINAGAC CATTOGGCAG CTGCTTTGGA
CACCTGGAGC CATTTCCTTT ACAGATGAAG ATGCATTGTG TCATTGTCTC AGGATCCTCG TCCTGTGCT TCTCTGGCCA
CAAATGTGTC TTTACCAAAG ATGATTTTAT TTCACTGTCT TTGAAAATCA TTCTTTATAG GTAGAATATG AAGATTCTCT
GAAATGATTC CAAAATGCCA AACTCAAACA CTATTGTCCG ATTTCTTTAC TTGCAACAAG AGAGTAGAAG GGACAGTATT
TGTTTTGTGA TGTGGGGCG TTCATCAGGG AGAGAATTG AGATAAGTAG GAATAGCAA TAGGAATAGT GAAATAACCT
AGAT

SEQ ID NO:1710: (Length of Sequence = 187 Nucleotides)

GGTGATCTGC CGACCAGAGG CCTTAACTC TGGTGTGAG TACTACTGGG ACCAGCTGAA CGAGACGGTC TTCACTGTCC
ATTCCAACAG CAGGAGCAGC GAGCGSCTGG ACCAGGCAGA GCACATGGAG GACAGCAGAG ACATGGGCTG ATGAATGCAT
TGGGCTTCAG CCGACCTGCA CTCAGTG

SEQ ID NO:1711: (Length of Sequence = 313 Nucleotides)

AGGGGCATGT NATCATTNA ATGATGINAT CTTGGTGTT TCCCTCATTA GCTGTAGACT ATCCCTCTC CTCCCACCAC
AATGTTTCTA TGATGAGTAA CAAACAGAAA GGAAATCACA TTTCATACT AAAAACAAAA TGATCAGAGC CTTGATTCT
CCACTAGAAA CTACACGTAC AGTTAAGAGT CCACATGCAA CACCTTAAAT CACAGACTGA GGACCTCACA TTCTGACCTG
GGAGTCTCCT CCCCTTCCCC AGCCTTGGGC TAGCTTTGGC CTAGGCTCAG GTAATACTGA CACCCACAGG CGT

SEQ ID NO:1712: (Length of Sequence = 202 Nucleotides)

TTTTGGTGGT TTCCTCTTA TTGTGTGCTT CCTACCTTCC CCCACAATTT CAGTCCCTTC CAACACCCCA AAAAGAAGGA
GTGAAAGGAA GGGATTGCTG GGGTTCTGAG CCCTTGGCAG TCAGAAGGAC AGAACCAAAC ATCACTGGAT GTGACACAGC
TGCATCAAGA AGTCTACAGC AGTATGGGAA GCGGCAGAGA AG

SEQ ID NO:1713: (Length of Sequence = 253 Nucleotides)

TGATTCAATG GGTCTGGGAT AGAGTCTGGT ATTCTGCATT TCTGACTAGC CTCCAGGTGA TACTGATTCT CCTCATCTAG
GGACCTCGCT TTGAGTAGCA AGTGTTTAGG CCACCTACTA GCAGGAACTA AGCACAGTAT CCTACAACAG CAAATGTCTT
TCCAACAAGA AAGACGAGAG CAAATNCTGA TGCCACATCT GCACCTGCTC AGAAAATAAA GAAGGGATGA GGAGCCCCC
AGTGGCACTC TGT

SEQ ID NO:1714: (Length of Sequence = 299 Nucleotides)

GGTGCAGCTG CTTTGAAAAA TGACTTGGCA GCACCTCAA ATGTTAAACA GAGTTACCAC ATGACCCAGT AATTTACAC
TTAAGGATAT ACTCAAGAGA AATGAAAACT AAAACATAC GGCTACCCAA AAACCTTACAT AAGANTGTTT ACAGCAACAT
TATTCAATAT AACCAAAATA TGGNAACAAC CACAATGTCC ATCAATTGAT AAMIGGGTAA AGTCTGGCAA ACTCACAGRA
TGGRATATTA TTGGTGGTA AAAAGGAGTA AAGAACTSN ATGTACTACA ACATGGGTG

SEQ ID NO:1715: (Length of Sequence = 371 Nucleotides)

TTTTTTTTTAC CGGGCGGTTT CTGAGTTTAT TTGGGGCACA CCGGACGAG GGCCCTGCAC CTAGAAGAAG GTGTTGGGCC
TCTTGGTGGT GAAGCGTGGC TTGTGCTGAC GGCGCAGGAC CCGGTGGGGC AGCGGGAAC TGATCTTGGA GTCGTGGAAC
TGCTTGACAG CCGGCGGGCG GCACTTGCTG GCGCGATCT CCTCCACCTT CATGATCTGA ATGGAGTGGG CTCGGGCGCG

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TCCTCATCTG TAAAGTGGTT AAAGACTGAN TAAAGCAAAA TATGTGCAAA CAGTCTGTGA ATGGGGAAGT AACAGATGTT
GCTTCTCTATT ATGTTCTCTC CTAGCCATGA ATATCAATTA TTTCAGAAAT GAAAAGGGAT CCTGCACCCA ATTTCAAATC
AAGCAAGTTC ACCTAGAGG

SEQ ID NO:1704: (Length of Sequence = 372 Nucleotides)

GCTTCCCGAA GGTCTTGAC GAGCGCTCTA GCTCTGTGGG AAGGTTTGG GCTCTCTGGC TCGGATTTTG CAATTTCTCC
CTGGGGACTG CCGTGGAGCC GCATCCACTG TGGATTATAA TTGCAACATG ACGCTGGAAG AGCTCGTGGC GTGCGACAAC
GCGGCGCAGA AGATGCAGAC GGTGACCGCC GCGGTGGAGG AGCTTTTGGT GGCCGCTCAG CGCCAGGNTC GCCTCACAGT
GGGGGTGTAC GAGTCGGCCA AGTTGATGAA TGTGGACCCA GACAGCGTGG TCCTCTGCCT CTGGCCATT AACGAGGAGG
AGGAGGATGA CATCGCCCTG CAAATCCACT TCAACGTTCA TCCAGTCTC TC

SEQ ID NO:1705: (Length of Sequence = 426 Nucleotides)

GATGCCTTAT TTAGTCCATT TGGTGAGGTA ATGTTTCTT GGATGTCCTT GATGCTTGTA GACATTTGTT GATACCTGGG
CATTAAGNG TTAGGTATTT ATTCCAGTCT TCACAGTATA GGCTTGTITT TAGCCATCCT TTTTGAGAGG ACTTTCCAAG
AATTCAAAG GGATTGAGTG TTGTGACCTA AGCCTATGTT CACTGCAGCC APTTCAGCAC TAGAGAGTGC CCTAAGCCCC
GGAATGCTGC AACTCTTACA GACTCCTTGA TACACAGCTT TGGTAGATTT TGGGAAAATA AGGGAGAATT CCCTGGGGTT
ACCAGGTAAA AAGTCTCTCC CACTTCCCTC TCTTTCTGGC AAAGGAAGTC AGTCTCTGCA CCAGGCTGCC TGGAGTTTGG
GGGAGGGATA AGGCGGTAC TCTAAT

SEQ ID NO:1706: (Length of Sequence = 412 Nucleotides)

ATTTTATTTT CTACATCGA AGAAAATGTT AAAGAGTATC TNCAGACACA TTGGGAAGAA GAGGAGTGCC AGCAGGATGT
CAGTCTTTTG AGGAAACAGG CTGAAGAGGA CGCCACCTG GATGGGGCTG TTCTATCCC TCAGCATCT GGAATGGAG
TGGATGATCT GCAACAGATG ATCCAGGCG TGGTAGATAA TGTGTGCTGG CAGATGTCCC TGGTGCAAA GACCACTGCA
CTCAAACAGC TCAGGGCCA CATGTGGAGG GCGGCATTCA CAGTGGGCG CATGAAAGCA GAGTTCTTTG CAGATGTAGT
TCCAGCAGTC AGGAAGTGGA GAGAGGCCCG AATNAAGGTG TACATCTATT CCTCAGGGAG TGTGAGGCA CAGAACTGT
TATTCGGGCA TT

SEQ ID NO:1707: (Length of Sequence = 434 Nucleotides)

GTGTGTCTGC AAAAAAAAAA AAGATTCTAG GCATGGTGGT GTGTGACTG TAGTTCAGC TACTCCAGAG GCTGAGGTGG
GAGGATTGGT TGAGCCTGGG TGGATGAGGC TGCAGTGACC CATGATCATG CATGGGAGAC AGAGCAAGAC CTTGTCTCAA
GAAAGGAAAG AATCACTGG CTCTTCTGTA AAAAATGATC TGTTAAGAGT AATTGAAAA ATAAATACAA GTAATAAAT
AATCTTTTCA TTAAGAAATA CTACCAAAT TAACATGGAG ATCTAGCAA AAGTCAAAG CAGCTNGGCG TGGTGGCTCA
CACCIGTAAT CCTACACCT TGGGGAGGCT GAGGCGGGAG GNTCGCCTGA GGTGAGGAG TCGAGACCAG CCTGGCCAAC
AGAGCCAAGT CTCTACTTAA ATACAGATTA GCTT

SEQ ID NO:1708: (Length of Sequence = 440 Nucleotides)

GGACCAGGAC TCCAGCACCT TCCTGGCTG CATCAACAAT GCCACACTCT TTCAAGATGA GATAAACTGG CGCCTCAAGG
AGGGACTGGT GGAAGGCGAG GATTATGTG TGCTCCAGC AGGTGCTTGG CATTACCTGG TCAGCTGGTA TGGTCTAGAG
CATGGCCAGC CACCCATTGA ACGCAAGGTC ATAGAGCTGC CCAACATCCA GAAGGTGGA GTGTACCCAG TAGAACTGCT
GCTTGTCCGG CACAATGATT TGGGCAAAATC TCACACTGTT CAGTTCAGCC ATACCGATT TATTGGCTTA GTATTGCGCA
CAGCTCGGGA GCGGTTTCTG GTGGAGCCCC AGGANGACAC TCGGCTTTGG GCCAAGAACT CAGAAGGCTC TTTGGATAGG
TTCGTATGAC ACACACATCA CGTTCTCGA TGCGGCCCTT

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GTACCCAGAG GCTTNGTGGG TGAGTATTC ACCTGCTTAC ACACCACTGA AGCCACAGCC AGCCAGTAAC TAAGGGGCAA
GAAAGAGCAT TGTCAGAGCT GGCTCTTTTG GGGGGTCCCC CATINGGCCA CAAAGGCCTC ACCCCCCACC CCATCCCCGT
AACCAGAAAC CACCTTGA

SEQ ID NO:1698: (Length of Sequence = 376 Nucleotides)

ATTTTATATG TTTATTACT TATTTTITAC CCTTTTTC AAGAGATGGG TCTCACAGTG TTGCCAGGC TGGACTTGAA
CTCCCACTOC TGGGCTCCAG CAGTCTCTCT GCCTCACCTT TCCAAGTAGC TGGGGCTATA AGTACACACC ACCATGCCCC
GCAATATTTT AATTCTCTGA ATGTGTCAAT TAGCCAGTGA TTGTTGTATT ATAATAGAAT CACAGAAATG GAGGGACTCC
TAGAGGTAAT CAAATCTGGT GGTTTTAAAG CCTTTTATTC CCTCTAAAGG GATAGTAAAA CCATTAAAAA TATAATTTTT
CCCAATTATG TAAGCCAGRG AAGCTGACC TYCTGGTTTA GAGAGGAACA CAGATG

SEQ ID NO:1699: (Length of Sequence = 365 Nucleotides)

GGTACATGTG CACAACGTNG GNGTTTGTTA CATATGTATA CATATGCCAT GTTAGTGTGC TGCACCCATT AACTGTTCAT
TTAGCATTAG GTATATCTCC TAATGCTATC CCTCTCTCT CCCCCTAGC CACAACAGTC CCTGGTGTGT GATGTTCCTC
TTCTGTGTCT CATGTGTCTT CATTAATCAA TTCCCACTTA CGAGTGAGAA CATGCTGTGT TTGGTTTMTT GTCTGTGCGA
TAGCCAGATG CAGCTACTCT TAATGTGCAT ATTTTCATCC TAGAACATG GAGAGTCTCT GTAAAGCCTT TGTGTTCAG
GAGGAGGAG ATCTGACCC TTCTGTGTAT GGCAGCAGTC AGGGG

SEQ ID NO:1700: (Length of Sequence = 397 Nucleotides)

AAAGGCAGTC AAGCAGGAGT TAAACAATAT GGACCTAAT CTCTTATAT GAGAACATTA TTAATTCCA TGTCTATGG
AAATAGACTT ATTTCTTATG ATTGGGAAAT TCTGGCTAAA TCTTCCCTTT CACCTCTCA GTATCTCCAG TTTAAACCT
GGTGGATTGA TGGGGTACAA GAACAGGTAC GAAAAATCA GGCTACTAAT CCTGTGCTT ATATAGATGA AGACCAATTG
CTAGGAAGAG GTCCAAACTG GGACACTATT AACCAACAAT CAGTAATGAA AATGAGGCTA TTGAACAACT ATAAGACTA
TTTGCCCTCAG GGGCCTGGGA AAACATTCAG GACCCAGGGA ACCTCATGCC CTCTTTTAG GTTCAATCAG ACAAGT

SEQ ID NO:1701: (Length of Sequence = 245 Nucleotides)

GTCTAGGAGG AGGCCTTCTG CACAGAGCCC CTGAAGAACA CAGGCAGAGG CCCCCACTT GGCTTCTACC AGTCCAA3A
CATGCGAGTG GAGGTGACCA AGTCTTTCAT TGAGTACATC AAGAGCCAGC CCATTGTTTT CNAGGTCTTT GGCCACTACC
AGCAGCACCC GTTCCCGNCC CTCTGCAAGG AGTGCTCAG CCCCCINAGG CCTGCGGCC GTCACTTCCC TGGGGTCATG
CCACT

SEQ ID NO:1702: (Length of Sequence = 349 Nucleotides)

ATCTGTGTGC AGCAGAGTTT TATTGTCTGT GGAATCCATG AGAGCCGGAA GCATGTTGG GGCCTGGCT AGCAGAGCTC
ATGGTGACCA GTCCCTGGCC TGACCAATGG GTGATTACAT TTAATAACCA AAACAACA AAACAATA CCAAGAACAG
ATCACTTGCC ATGGACATCA GTAATCTATT GGTAAATGGT AAAATTTTAT GAAATTTTCC CCTAAACCAT AACAAAACT
GTCTCTCTTA CCCCAAGT GCTGGAGGGA AAGATGGTTG CATGGCTTTG ACCTCTCTTT GAACCTGAAA TGCTACCTTC
CTACCCGGAA AATGCGGCAC ACTATACTT

SEQ ID NO:1703: (Length of Sequence = 419 Nucleotides)

GAGCCCTGC CCTCCAGAAG CTCACATCCT CTTACTCATG GCAGACAAAT AAACGTGAAT TACACTGCAG GGAGGTAAGT
GTGGCAGCAG ATGTAGTATG CAGTGACAGG GTGGCCATGG TTGCTAGGGC AAGGAGGGCT TCCTAGCATG GGCTTATTT
GACCAGAGGC TGGCGGTGGC TTTTGTAGC AGTGTGATTG TATCTGAGC CAGGACAGA TACCTCTNTG AGCCTTGGTT

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CTTAAAGGCT GCAGCATAGA ATTGAGCTGT ATAACAGTGT TAGAACTGTC AAGTGATAAT CACAGAACAG TTTGTATCGG
TTTTATAATT CTCATGTCIT GATCAGATCT GAAGGGAATA GGCATACCTT CC

SEQ ID NO:1692: (Length of Sequence = 360 Nucleotides)

TTTTTTTGGC AAAAATAGTA TATATTTATT ATGTACAACA TGTATTTTGA GATATGTATA CATTGTGGAA TGCTAAATT
GAGCTAACAA ATACATTATC TCACATACCA TGTTPPTTTG TGGTGACAAC ATTCAACAAT ATAGACCATT TCACAAATTT
GCATGTTATC TTTGTGCAGG GGCTATGCCA ATCTTCTCTG TATTTTINCA ATCTTGGTGT ATGTGCTGCT GAAGCACACA
CCCTAATTCC TTTCATTAA GGNCTAGTT AACCTTCTC TTAAGTATAA CCATGTATTT TGTTAAGCAA TATCTTTTTA
TTACAAAAT GCCATTTTTT TCTGNTAGG AAAATTGATT

SEQ ID NO:1693: (Length of Sequence = 378 Nucleotides)

GACAAAAAGA GGGGTCTGGC TGCCGATGTG GAAATTTGTT TGTGGACIT CACCGTACT CTGACAAGCA CAACTGTCCG
TATGATTACA AAGCAGAAGC TGCAGCAAAA ATCAGAAAAG AGAATCCAGT TGTGTGGCT GAAAAATTC AGAGAATATA
AATTACTTCT TGTGAAGAGA CTGAACTTT GTTTTTATTT TAATATATCG TAGGAAAACA TTAAAGAGCA GATGCATGGC
CATTTTNCCT TGATGTTCTC CAGAGTTTTA CATTACACTT GTCTGTCTTA TAATGATAT TTTAGGGATG TTTGGGTGTT
TGTTACAGGC AGAATTGGAT AGATACAGCC CTACAAATGT ATATGCCCTC CCCTGAAA

SEQ ID NO:1694: (Length of Sequence = 362 Nucleotides)

AATGCACTTT ATTGGCTCCC AGGGAGTGGG ATGCAGGATC AGAGTGGACA CGCGCAGGGG GCTGGTGTGG GGAGCAAAGC
NCCGGGCCTG CCCCAGACCC TGGTTCCCT GAGGACCAAC GTGAATGGGG GCCCCTGAG AAAGATGCTT GGGGCTGCAG
AGCGGATGGA ATGCAGGCCC AGGTGCTGG GTGGTGCCCT CAGCTCCTGG CAGGGTTGAC GGGTGGTGGC CGCTGGGCTC
TGCCAGCCGA TGGTCCNCTG GCACCTGATC CTGTCTTCCA GCTTCACTTC CGGGCCTGCT CGTAGTTGTC AGTGAACCAA
GCACAGGTCT CTTTGACCGN CTGCITTINAA GGGTGTGAAN CG

SEQ ID NO:1695: (Length of Sequence = 411 Nucleotides)

TTAATACAAG GGGTTTGAAC TGGACATCCT AATGATGCAA TTACGTATC ACCCAGCTGA TTCCGGGTGG TTGGCAAAC
CATCGTGTCT GTCTGTAGAG GCTCCACAAT GCCACCCGC ATCGCCATTC TGTAGTCTTC AGGGTCAGCT GTTGATAAG
GGCAGGCTT GCGTTATGG CCTAGATTTT GCTGCAGATT AAATCCTTTG AGGATCTCT TCTCTTTTAC CATTTTNCCTG
CGTGTCTCA CTCTCTCTT CTCTCTCTAG CTTTTTAATT CATGAATATT TTCGTGTCTG TCTCTCTCTC TCTCTGTGTT
TCCTCCAGCC CTGTCTCTCG AGACGGTGT TTCTCCCTT GCCATTATC TTTTCAACTC CCAGGGCTAC CCATTTCAAT
GGTGGGTCTG T

SEQ ID NO:1696: (Length of Sequence = 280 Nucleotides)

CTTTGTGATG TTTTACGCT TTACAAAAG CAGATTGGT ATTCAGAAAA GCCTGCAAAT ACAACATTGC TTAAGAGAAC
CTGTAAACAC GTTTGGAATA CAATGCAACA CAAGTCAGCA AGGACAGGGG TAGGTCCAAA GGAGCCAGCT AGGGGAAAG
GTGACAGAAA AGGAGAGGGA AGGATGGNGA CAGACATCAC CTGTGGTCTC TAAGGGGGCC NIGTGTITAA TTTATAAGGT
TTNCTNCCCA CAGGAGTTCT NNTGTGATCT ATCCGTTTAT

SEQ ID NO:1697: (Length of Sequence = 418 Nucleotides)

ATTTCTTCAT TTACAAGAGG AATATATTTG GCTTCTCTCT TAAGACTCTG AGATTACAA TCAGCAGCTC TAAAAAATAA
AGGAGCAGTT TGGCTTCCG AAGGAAGAGG AGGCAACACT CGGACCTGGT TCTTGTACAA CAAGAAAACA TCGCTGGGGC
CCCGCTGAGG CTGGAGTGGG GGTGGAGGCT GGTCTTTGGA GGATGCCACC CCCACCCCAT CCTCTGTCA GGCCCTCGGG

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TGAGAGAATA AATGGGTAAT GGGAGGAGAA CTATTTTAAC AAGGGTCCTG GGTTCCTCTT TGCAAACACA GTAGGCTTAA
ACTTTGCCCTG CTTTTTAAAA TGGCATTIT

SEQ ID NO:1686: (Length of Sequence = 445 Nucleotides)

TGTCITCATA ATATAACAAC ACTAATACAC TAATAGTAAG ATTAAGTTAG GCAGTCTTCT ACCAAATGTG TAATGGAGAT
TGCCCTCAAAA TTGTGTCCAC ATAATCCACG CTCATCTTGC AAAGCGCTAT TTCAGGCACT TTTTTTTGAG AAAGAGTCTC
ATTCTGTGCG CCAGGCTGGA GTGCAGTGGC GCAATCTTGG CTCACAGTAA CCTCTGCCTC CCGGGTTCAA GCGATTCCCC
CGCCTCAGCC TCCCGACTAG CTGGGACCAC AGGCACGNAC CACCACGNCC GGCTCACCTT TGTATTTTTTA AGTAGAGATG
GGGGCCTCAC CATATTGGGT CAGGCTGGGT CTTCAATCTN CCTGGACCTC ATGNTCCACC CGCCTTGGGC CTNCCAAAAG
TGCTTGGGGA TTANAGGGAA TNGGCCACC GGGGCTTGGG CCAAT

SEQ ID NO:1687: (Length of Sequence = 170 Nucleotides)

AAAAACCAA TAAAGCAATA ACTTTAAGA CCTCAGACAC ACACAGTATA AACACCTGGG TAAGGTTTTN TCCGTGTCCA
TGTTGACACC GGAAGTACCG TTAAAGTGCA AGTTTTGTTT TGTGTTCCTT TGTGCAGTTT CACTCACATG TAAACAAGTC
ACTTGGCTAT

SEQ ID NO:1688: (Length of Sequence = 386 Nucleotides)

AATGTGATTT GATGTTAACA CTAGAGAATG ATGACTGTAG AACATTTGAG CAAGTAAAAT AGTAAAGCAC ATAGTGAGTG
TATGTCCATC TAACITGGTAC ATTGATAATT TAGTTTGGGC ACATAAAAGG AATATTTATA TGGCTTCCCA AATGCAGAGT
TACATCTTAT TCGTGTATTT CTCGAGTAT TTATATCCCG TCTCCTTTTT TCATTCTTAA AAATAAATGA ATTTTCAGTG
TTGGCACATA TGAGGCTTAA ATATAAGGAG CATAACACTT GCATCTAAT TTTTGCAIAT ATTGTAAATG TGTCTGGIAT
TTACAGCAA ATACTGTGTA TCCTTTATGG GTAAACAAAG TGACATTGCA TGCATGTAAT GTGATG

SEQ ID NO:1689: (Length of Sequence = 400 Nucleotides)

CTCTGTCCG ATCAGCGTAT TCCTAGATTA GGAATTCAA TTAATGAAAA TTCACATATG AAAGGAAAAT CCATTGCTAT
TTCGTGAGAG GACCTCAGTC CTGGGCTTTT CCCTGGCATT GCTACCTGGG TGGGTGCTCA CCACTCAGGT GCTGGTGTG
GAAGGCAGGA GGAGGAACCT GAAATCCTGC CGATTAAAGC TAATTAACAG GGTTTAGGTG CCTAATTATC ATGACTCAGC
CCGGGACTTA TGGTTAGCG TGCAGGCCAG GTGAGTCTCT TATGGACTTC CTCTCAGACT GCCTTTCTC ATTTTGTCTT
GATGAGATAT TGACAGTCAT GTCCACCGC TTCTCATCC ATTTCCCGTC TTTGGGCCCT GGGGAAGTACG GGGGCCCTCTG

SEQ ID NO:1690: (Length of Sequence = 337 Nucleotides)

AGINATATAC CTTTAAAAGT AACTAATGCA ACTGCCAAAN AGGGACAGTG TCAATATCAT TGINTTCATT AGAAGGACGG
CTGCCCCACA CTGINAGAAC ACTGCTGTTC CTAACAGTAG TTTACTTTNA GAGGGATGTA AGAATTAGTT TNACCTTAAT
TCCAGATGTG CATGCCTCAA AAGAAAAATC CCATTCTCCT TCCTTTTGGG GAGCATTIT GGTTGCCACCA AGGCTGGTGT
GGGGTAGTGG AGAGAGCACT GAGCTTAGAG TCACAACCAG ATGAAACTGC TCTGGTCTTC ACTAGCTGTG TGAATTGGGC
AAGCAGCTTG CAGTCTC

SEQ ID NO:1691: (Length of Sequence = 372 Nucleotides)

TCATTTCTCC AAAGTGCTGG GATTATAGGC GTGAGCACGT GCGCCAGCC TTACTTATTT TTAAATCAGA TTTTTTAATC
AACTAAAACA GCTATGAGTT AAGTACCTGC CCTGCAAAA TTTTATAGAA AAGTTTTAGG ATTATGAAAT TAAGAATTAT
TTTCCTTAAC TGAACAGTT CTAATAATTA TCTGATACTT CTCTAACAAG TGAGTGATCT CATGTAACCC CAGTTTGTAT

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SEQ ID NO:1680: (Length of Sequence = 438 Nucleotides)

TACCAGTAGT TCCTTTCCCG CTTTATTTT TAGCTGCTTT TTGGGTTTTA TACAATGAAC ATGTATTAAAT TGTAGAAGAA
 AACGATGTCA TCCTTTATGA TAAAATCCAT TTCCATTTTA GCTTTTTTAA AAAACAAAA AGCTGTTGTG GACAGATGAA
 CATCCAAGTA CTGGGCACAC CTCCAGCCCT CCCTCTTCCA CTGAAGGCCA TTGCCTATTG CTAGAAAGTT CTTTCCAGG
 TATGCAGCTT TCAGTTTCCA CTTAGAGGC CACAGTGTCT GGGGGAACGG ACTGCCCCCA ATACTAAAGG GAGTCAAAAT
 CTCTTTAATT NCCGCACTTC CTCAGTACCA ACAAGGAAGT CCCTTCTTTA GGGCCACTGG ATGGGAACCT NGGGACCCCC
 CTTTTTGAT TGGCAAGCAT TGGGGNTCCT AGGGCCTT

SEQ ID NO:1681: (Length of Sequence = 370 Nucleotides)

GTCTGGGAAG GGTACAATGT CGTCCGCGCC TCGAGGGCCA TGATTGGACA CACCGACTCG GCTGAGGCTG CCCCAGGAAC
 CATAAGGGGT GACTTCAGCG TCCACATCAG CAGGAATGTC ATCCACGCCA GCNACTCCGT GGAGGGGGCC CAGCGGGAGA
 TCCAGCTGTG GTTCCAGAGC AGTGAGCTGG TGAGCTGGGC AGACGGGGC CAGCACAGCA GCATCCACCC AGCCTGAGGC
 TCAAGCTGCC CTTACCACCC CATCCCCAC GCAGGACCAA CTACCTCGT NAGCAAGAAC CCAAGCCAC ATTNCAAAAC
 TTGCTTGTC CAAACCACTT ACTTCCCTGT TNACTTTTG CCCCANCCCA

SEQ ID NO:1682: (Length of Sequence = 397 Nucleotides)

ATGTAATCCG CTGCACAAA CACACCTTCA CCAACCACAT GGTTTTTAAG TTTGACTGCA CAAACACACT CAATGACCAG
 ACCTTGAGGA ATGTINACAGT GCAGATGGAG CCCACTGAGG CCTATNAGGT GCTCTGTTAC GTGCCTGCCC GGAGCCTGCC
 CTACAACCAG CCCGGGACCT GCTACACACT GGTGGCACTG CCCAAAGAAG ACCCCACAGC TGTGGCCTGC ACATTACAGT
 GCATGATGAA GTTCACTGTC AAGGACTGTG ATCCACCAC TGGGGAGACT GATGACGGAG GCTATGAGGA TGAGTATGTN
 CTGGGAAGAT CTTGGAAGTT TACTTGTAGC TTGTTACAT TCCAAAAGT TCATGGAAAC TGAACITCGA GCAGCCT

SEQ ID NO:1683: (Length of Sequence = 396 Nucleotides)

GGCTGCGCAG AGGAGCCGCT CTCGCGCGC CCACCTGGC TGGGAGCCCA CGAGGCTGCC GCATCCTGCC CTCGGAACAA
 TGGGACTCGG CGCGGAGGT GCTTGGGCG CGCTGCTCCT GGGGACGCTG CAGGTGCTAG CGCTGCTGGG GGCGGCCAT
 GAAAGGCGAN CATGGCGGCA TCTGCAACA TAGAGAATTC TGGGCTTCCA CACAACCTCA GTGCTAATC AACAGAGACT
 CTCCAACATG TGCCTTCTGA CCATACAAAT GAAACTTCCA ACAGTACTNT NAAACCACCA ACTTCANGTT GCCTCAGACT
 CCAAGTNATA CAAACGGTCA CCACCATGNN AAACCTTACA AGCGGGCAIT TTAATTNCA ACANCAACCA GGGGAT

SEQ ID NO:1684: (Length of Sequence = 417 Nucleotides)

ATCCAGGGGA GATGCATGTG GAAATGTGGT CCTCTGGGGT CAGACCCCTG CACGGGACAT CTTGCCITTN AGTGTGCAGA
 GTACATGGGG AAGGGGCTGG GGGCACCCT GTGTACCTGG GCCCAGTAAG GCATTTGCCG TGATTCCCAC AACGGGGTCA
 AAAGCTGGCC TTCAGGGTGA CCTAACACCA CCTCATGCCC TGCTATAGAC CTTCACAAAC GACTTCCACT GCTGAAGCCT
 GTAGGCTCTG TTTAGAGACA AGAAGATGGC TGGTAATTTA AGCACCATT TCCCAAGTGC CCACTCTCCT TTGTGCTCTG
 TTGGCTTTTG GCCTAAAGCT TNNCCAGAG TTAGGGTGTG GGATGTCTGT GGTCTGTGAG ATGCCCTTCC CTTCCCCCT
 CTGCTTCAAC CGTGGTT

SEQ ID NO:1685: (Length of Sequence = 429 Nucleotides)

GAGCCATGGA GAACTCTGAA AGGAAGAATC GCTGCTTTC TCAAGCAAAT CGGTTTCTTG ATGTCCTTTG GTTCTCCTTG
 CCTGCNCTG ATGCTTGNC CCCTTTAATT GATCAGAGTG CTCTAGAATA ATGGATGGTC TTGGATGATG GATAAATAGG
 GACAGGGACA GTTAAATGG GAGCCTTTCT TACAACCTTN ATGGGATTTT CCCCCCAAG TTTCCTTCTC CACTGAAATG
 CCACACTAAT GCTTGTGGG ATTCATGAGG TGGCCAGACC AATGTGTGT TTGTGTGTG TTTTTTTTTT AAGCTTCCCT

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CTGAAATTTG GCAAGAAGGG GCAAAAACGT GACTATTAAT GATTGATAAG CACCAGTGAA GAAGTTCTAA CTTTTCAGCAT
 GCTGCACAGA AACTGGTATA ACATGCCCTC AGTATACTAA CACTCATATG CTCAGTTTGG TTTTGTTTTG GCAGTTGACA
 AGAAGTTAAT TTGCTTTAGT AAAAATCCCT CATTCAGCC TTTCTATATA AATAGCTCTT TCTTGCTGTT TTAATGTGGT
 GCACACTATA GCCTCACAAA CCTGTTATTC CAGTGTAAATC TGCAGTGTGG TAACTAAAGT TACTGGCTTG GGTCTTATTT
 GCACAGTTTT TGCGNCITGT TTGCTTCTTG CATCTGGATT AACTAGGAAT ATTTCTC

SEQ ID NO:1675: (Length of Sequence = 381 Nucleotides)

CAGAAGTCAA TCAGCTACGC ACCCAGTTCT CAAAGACCTC ACATGCTAGG GAAGGTGGG AGGCAGAGTT GTGGTTCAGA
 AGCAGTTACA GGTCTCAAAG CAAGAACAGC AGCCAAAGCT TCCAGCCCT GACGCTGCCT CTGAATGGTA AACCAATGGC
 ATATGGTATC CACAGCTAGG CTTTGCTTTT TCTGAGTGA AGGTAAAGG CATTTGAAA TAAACCAAG TTTCACAGAC
 TATGTTTATG GAACAAACAT GGGCCATTTT CAGGGATATA AAAGTCGATG TTCTATGTAG GCCCCATAT GAGTATTTAT
 CTACTTTTTA TTTACTTTAT TTTATGGAAT TTTTGTGCA AGGGGCTTCA CTCGTGTCGG A

SEQ ID NO:1675: (Length of Sequence = 404 Nucleotides)

CTGTGTGAT TGCTTGAGCC CATCACAGTT TAGCTCTCAC AGCTTTAATT TACTAGCCCA TGAGAAGTCA GCTTCAAAGA
 ACACCATTTC GACTCTCAA GAACATTATC AATGTACATG GATAGCTTCC AACTTCATAA GGTGTTTCTC TCTACCTAGA
 GCAATTAACA TTAATTTGCA GAATAGTGT TATTGAAAAC CTTTGTGTAT CTCCAACAAA GTAAATAGTGT ATTGATTTCA
 TTCTACTAT CTTCAACTGT ATCATTAAAG GGAATTTCTT AGGNAAGTCT ATATGCAGTA AGCAAGTAAG ATCGCAGAAC
 ATCAAAGGGN GGAAGTAAAT CCCAAACTG GNTTTTACCT TCCTTCCCT TAGGTGAGGG AAAGGAATTT ATGGTTTIAA
 AGCT

SEQ ID NO:1677: (Length of Sequence = 388 Nucleotides)

ATGGACAAC ATGAGCCAGG AGTCTACACA GAGAAGGTTT TGGAAGCCAC TAAGCTGCTC TCCAACACAG TCATGCCACG
 TTTTACTGAG CAAGTAGAAG CAGCCGTGGA AGCCCTCAGC TCGGACCCCTG CCCAGCCCAT GGATGAGAAT GAGTTTATCG
 ATGCTTCCCCT CCTGGTATAT GATGGCATCC GGGACATCAG GAAAGCAGTG CTGATGATAA GGACCCCTGA GGAGTTNGAT
 GACTCTGACT TTGAGACAGA AGATTTTGTAT GTCAGAAGCA GGACGAGCGT CCAGACAGAA GACGATCAAC TGATAGCTGG
 CCCAGAGTTG CCCCAGGCGA TCATGGCTCA AGCTTCCCCA GGGAGCAAAA AAGCCGGAAG ATTTTCGG

SEQ ID NO:1678: (Length of Sequence = 428 Nucleotides)

TAACTGTGCA AATAATCCAT GAATATATTG TTTTATACA GCATTACAGA TAAGGCTTGC AGCTCTATAG ATCACCCTCA
 TCCACTCCTT CACTCCATTG CTACACTTAA AAGCCTCACA TGCTCTCCTG TCCTCTCCAA AGGCAGCTGC TAGCATCAGC
 GCCCACAGTA GCTTCTTTT GTTTCCTGTT TATAAACCAT ACATTTTCTA TGGCTACACA TACGTGTATT GTTTGATGCT
 TTCTAATAAA ATGTATCAT AGTGGTACAC ATCTTTCACA CTTCCTINAT TACAGTCAAC ATTGNGGA ATACAGAATG
 CAGCAGATCA AGGANCITTT CTCAGTCTTT TCTAACATGN CCCCAAATAC AGCCTCACTA TGGGGTCCAT TTAGNGGCT
 CATTGGTTTT CACTCTACA ACGTGGC

SEQ ID NO:1679: (Length of Sequence = 256 Nucleotides)

GGTGTCCACA GCTGCTGCC TGGCCTGGAG CAAATACCTT TGTTAAGTGC TCAGAGGGTA TGGCCCTCA AATCCACCCT
 GCAGCTCCCT GGTGCAAAAT ACATCTACTC CATCTTTTCA ACTGCTCCC TGGACCCCTG GTTAACACTT CACTGTAACT
 CCTCAGTTGT ACAAGCAIT TTTATTGAA TACAAAAGGC AACTNGNCAC CANATGGGCA TCCTTGAGCC ATGGTAAACA
 CTGAATTNA GGCTCA

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GGCTGGAGCC TGGCCCTTTN CTCCATGCTC TTGNTCCCT TGGTCATCGT CATCOGGCCT CTGCCAGACT GAGGGGGCCG
TTCCTTTGTG AGAGTCAAGT ACCTGCTGAC CCAAGGGAA CCAACC

SEQ ID NO:1668: (Length of Sequence = 300 Nucleotides)

CCAGACAAAT ACCAAGTTTA TTTCACAAAC ACTAGGAAGA TGGGTTGAGG GTGGAGGTGG GGGACACAGG TGCGCANTGC
ACAGAGTCAG CAGCAGCAGC CTGNTCCCG CACTGAGGAC TCGGCTTGA CTGCAGTGCC TCCAAATCAA CACGCAGCAA
GAGGGGAGTN CAGNGAGGGC CCINAACACC AAGCCTCTGA AAGGCTAAGG GACACAGCTC CATCTGTCCC AGGAAAACCA
GCAATAAATA AAAGTNNGGC ACGGCCCCAC CCACACATAT CATCTAGTCA CCCATCTTCA

SEQ ID NO:1669: (Length of Sequence = 334 Nucleotides)

TTTTAATGAC AGATTTTCCT AAAAGAAACC ACTATAACAT CTGTCCAAGT ACTCCAGAGA AAACAAAAA TACATAAAGA
TTAAAGTCT ATTACTTTAA CAGCACATTG CCAACACGG ACAACTAGGA TAAATGCCAA GAAACCTTAA AAAATAACTT
TAAAGATGC AACGTTCAG CCATTCAAAC GGTAGGTTT CACAAACAAC AGGNNACAA GTCCAAGAGC AGTTCTACTT
GTGCATGATG GTAACTCAGA CTGTACTTCA TCAAAGTTCA TTCAGGTGTT TCATAGGCGT CTGAGCAGAG TTTTGTTTTT
TTCTTTCCTT GCTT

SEQ ID NO:1670: (Length of Sequence = 287 Nucleotides)

GATAAAGAG AAACAGCGAA GTTCAAGAG AAAAAGTTGA GGTCTTAATA ATTNMTGGC AACTTGACAG CAGAACAGGG
TAAANAGAG TTAGCTACAA AGGCTCATCA GAAATGGCA ATAGATTCCA GAGAGATTTA ATAACACTT ACAAACTCTG
CTATAGGTGA CAAATCTGAC CATGATAAAA GCACCGTAAA TGATATAGGT AACACTGNGC ATATGAAAAC TCAGACTGTG
CACTAGATAA AAAGGAANCC CAGCATAACG TGTTACCACA TGTAAAT

SEQ ID NO:1671: (Length of Sequence = 187 Nucleotides)

GATAAAGAG AAACAGCGAA GTTCAAGAG AAAAAGTTGA GGTCTTAATA ATTTKGGGC AACTTGACAG CAGAACAGGG
TAAAWTRAG TTAGCTACAA AGGCTCATCA GAAATSGCA ATAGATTCCA GAGAGATTTA ATAACACTT ACAAACTCTG
CTATAGGGTG GACAAATCTG GCCCATG

SEQ ID NO:1672: (Length of Sequence = 329 Nucleotides)

ACATCACAAC ATCGTTTATT ATGTGAATTT TTACAAATAC AAACAAAAA TACAGAAATG CAATATATGA ATACAGCTAA
ATGCAGAATG GTGACTTTTT TCTCTCAAG AGGCCATGAT TCCATTTCT AGTAAATAA AGAGACTGCA TATAGGTAGA
AACAGGTTGG TCATTAGCTT CACAATTTTG CCTAGAAATG ATCTATAAAT GCATTTCCTC CCTGCTACT TACCCTAAAG
TGIAAAAGG GAGTTAAAGG AAAGTTTCCT TGTGTTTCC TACCATATGA AAGATGCTAT ATTCTATTTT AGCAGTGCCA
ATATATGGG

SEQ ID NO:1673: (Length of Sequence = 386 Nucleotides)

CTCCCTACTG TGATTCTCAT CAAGCTGGAA GCGINGTGAG AAAGCACTTC AGTTTCTTCC CTCGGATATG AACCTGAGCT
CTCTGATGAG GTGGTTTGA AGTGGCCCTG GGAGAAGCCC ACTTCTTGGT CACAAGATAC TGCAITCTCC TGGCAGATGA
ACCAGCTGCT TCCAGCATCC TCTGTGTGGG TCTCAAGCC TAGCTGCTCT ACGTGTGGC TGCACAGTGG CATCACATGG
GGAAAGTAGAA AAACCTCTGA TGCTGTCCC CACCGGCTT AATCAGAGTG AAGTCAGATT ATCTGGGCT GGGACCTTAC
CATCATTTTT TTAAAGAAT TGCAGGGGCC AGGGGTGGC GGGCTTCAGA GCTTCTTAGC AATTTT

SEQ ID NO:1674: (Length of Sequence = 377 Nucleotides)

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SEQ ID NO:1661: (Length of Sequence = 294 Nucleotides)

AGCACCTCCC CTGAGGGCCA GGCCITGGAG AACCGGATGA AGCAGCTCTC CCTACAGTGC TCAAAGGGAA GAGATGGAAT
 TATTGCTGAC ATAAAAATGG TGCAGATTGG CTGATTCATC CTGGGOCCTG GCGGATATGC ATATCAACAT TTATACATGG
 AACTGTGAGA ACATTKTGCC AATAATCATT TAATATATGC CAAATCTTAC ACGKCTACTC TAAACTGCTC TAATGAAGTT
 TCAGTGACCT TGAGGGCTAA AGATINTTCT TCTGGTGTAA GAGCTCTTTG GGCT

SEQ ID NO:1662: (Length of Sequence = 291 Nucleotides)

GATTTTCATC AGGCAAATNA AAGTAACCAC AGAAACAATT CAGTAATACT ACTAAGAGAG ATTAACCTCC CACTGGCCTT
 GGAATAGCTA AGTGCATTGA TTTTKGTGTA GTTGIGAGTT TTTTCTYTC ATTGATATTT TACGTATTKC TGGGGTAAAT
 GTATTTTWA CATGCATTGA ATGTGTAATG ATCAAGTCAG GGTATTTGGG GCGTCCATCA CCTGAGTGT TTATCATTTT
 TATGTGTGGT AACATTCCAA GCGCTCTCTT CTAGCTTTGG AATATATAGT G

SEQ ID NO:1663: (Length of Sequence = 345 Nucleotides)

GGCAGTGGGA CTCCTGTGG ATAGACTGAT TCTTGTTAG AAACAACAGC AAAAAGAAGA AGGCAGGAAA GAAACTCCCC
 GGCTGGAGG AATGTCTCTG TGATCCCAT TCTTGATGGA GGGAGTAAA AGGGGCTGG NCTTCGCCCG CTGCTCTCT
 GACAGAAACA GTAAGTINACA CCAGGACAGA AGGCAGGAGC CCTGAGAACT CACGGCGCTC TGCGTGTCT CCAGCCNNNC
 ACCCGTCTCC AGCCACCCCT GGAGCGGCG TGGGGAGCG GCAGAGGGG CTTTTCGGAG GGCCACTAT TNCCACAGT
 CTTTCTTNG ACACCCAGAA AACTT

SEQ ID NO:1664: (Length of Sequence = 334 Nucleotides)

GTAAATAAGA AAGTGAATA ATTCCATATA TGTAAGGTTG ATAGAAGATA ATCATCAGGG TCAGAATTAA GAGGTCTTGT
 GGTTTAGGAA GCATAAAAT ATGTAACTTA TTGTTATTT CACTCAGAAA ATAAAGTAT TAATGAAAG AGTTAGAGAT
 GAACAGATTG ATACAACTG TTCTATGGT TACAGCTTAA AAAATAAAGG TACATTTAAT GCTATGCATT TTGAGAATAA
 TGCTTTTAT GCINTTCTT TTTACATATG TATCTNTTG TATTTAAGGT CAAAATAGAT TGACATTACT AATTACTTCA
 CTATTAATAA TTAA

SEQ ID NO:1665: (Length of Sequence = 310 Nucleotides)

TGTACINCTA TGAAGCATCC CTCCACATC AGATCAAAGA CATCTTAAAG CCAGAAATAA TGGAGGAGAT TGTGATGGAA
 ACACGCCAGA GGCTTTTGA ACAGGAGGGA TAAGGAGGTG CTCCAGAAGC ACGGGACTNT GGACCTTGCA GGAGTGAAGA
 CTGTRATGTG TGGTCCCAT ATGTGGCTCA GCAAAGACTC GAGAGATCAT CCTTTGTCT GCATGACGG CCTGTGACG
 GCGTCCAGCC CACAGGCCCTG CTTTCTCTG TCCTAACACC AAGCCTGGGT GGCAGATGAA CAGTCTTCC

SEQ ID NO:1666: (Length of Sequence = 352 Nucleotides)

TTTTTTTTTA CATACAAAGT TTGGATTTT ATGAAATCT TGTAGGTAT CAAACAAAT CTGCTTCTT CAGATAAAAA
 TATTCTCTCA GATGCTCCA GATACTGCT AAGTCTAAT TGGTCTTCA ATGTCTTAT TTTATGTCC TCGTGAATG
 TTCAATATACA GTTAAGATGT TCCCAAAGG ATTTTATCG GTTAAAGGAG CGTACATGAC GACCTCTACC ACTGCCCTCA
 CTAACAACT TTCTCTTGA GCGTCCACTG CGCTATTG CACTAGCCA GGAAGGTCC AAGTCCCCCA CGACCTTAG
 AAGCACGGT CCGAGGGACT TTGGCGTAA CC

SEQ ID NO:1667: (Length of Sequence = 287 Nucleotides)

GACAATNATG CCGCTGCCA CATTITGGTC CATCTTTT TTTATTATGC TTCTTINCT TGGACTGGAT AGCCAGGGAT
 GTTTCANCT CCGCTGCTC AAGTACGTAC CCTGACCTA CAACAAACA TACGINTACC CCAACTGGGC CATTGGGCTG

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AATCATCTGG GGCACCTCTA CCTGTCCAG CTCCTCCAG GGATGTTTTG GTGCCGCTCA GCTCCTGCCC GTGTCATTGT
GGGTCTCTC AGAGTCCCCA TCGATTACA GG

SEQ ID NO:1655: (Length of Sequence = 325 Nucleotides)

AGGGTAAAT GTGAGACTGT TTGTATATAT TTTTGTGTTA TATGTTTTTG TTGTTGTTAT GTTGTATNT TTATTTATAA
AATGATAGAT CTGTGGGTAG GTTCTGAGAA ATGAATAGCT TGTATTCTCT TTTTATGAA AGAAGAACAA AATGAAGTTC
AAGTGGAAAG TATCTCCAGA AAGTTTAAAC TTTTCTTATT AACCAACTCA TTGATTGGCA TGTGAAACTT GAGATATTTT
ATATAGCACT TTTTAAATGA GGATCTAGCT TCACINTATC ATACAACCAC ATTTAAATA GCCAGGTCCA TGGTCATTAT
AGGGG

SEQ ID NO:1656: (Length of Sequence = 285 Nucleotides)

GAGGNTTAAAT AGAATAGATC AAAGCAGAAT GCAGTGTGTT CATGTCATAG GTTGACTTCT CCAGGAAACC GACCCCAAGT
GGAAGGTTTA CATGCAGGTG GTTTATTAGA GAGTGATGTT GGAAGAACA CCTGTAAGGN AAGAAGGGAG CCTGGGAAGA
GCAGNGGAG AAGGTGAAC CTGATTCCT TCAACAGAG TCCTAGGCTG AGTGCATGGG ATNCTGTAGA GTTGGGGATG
GACCTTCAGA GATATTCCAA ATAGAGAAAG AATTCTGT TACTC

SEQ ID NO:1657: (Length of Sequence = 385 Nucleotides)

GACTTGACTT TGCTTTTTC CCCCCAAGTA GAACTAATGC TAGCTTCCAG CTTGAAAGTA AACTCCAGT GTGGAGTGAA
TTTTGTGTCT AATTATAAAC CTGTAACCA AACTCAGACA TCTGGTACTG GTCTTTGCAT TGAGATTGGT CCTGTAAAA
CCCCCTTTAA AAGCATATTG CATTAGTAC AGAGCTCTT TTTGAAATGN AGGCTGGAGA TGTGCATTTT TCAGGTGTT
AACTGGTGT ATCTATTAG CAAGGAGATT GGGGGTTTTG AGTGTTCG TGGGTGGGT TCAAAATTGC CAGGGGAACC
AGTGGCAGG CTCTAGCAA GGCAGTGAGG AAGCTCTGG CAGCCAAATG GGTGCATTT CAGGG

SEQ ID NO:1658: (Length of Sequence = 338 Nucleotides)

GATCAGGACC TCTTCTCTCT CCAACACTG CCAAGAGC CCGTTGTAA ACGTTTACCA GCACACTACT GGGCTGTTTC
TCTACCACTT GATTGAAATG ATCCTTATGG AAGCACAAT GACTTCACTG TCACTAAATC CAAGGGACAA TTTTATGCT
CTATTTTCT TCAACTCTCC AGGATGTTG AGAGCTGATC TTTCCCTCCC TCTTGAGCCT CCTCTCTGC CTGCTTTTA
GGGGTCTCTG CTGACTTTTC TTCATTCTA AACACATG TN CAGGGGGT CCTCAGCCCT GCAAGGCCNA TGCCTGGGT
ACCCAGTCTT GTGGCCT

SEQ ID NO:1659: (Length of Sequence = 346 Nucleotides)

AGTATGTGAA GTCAATCACT TTTTATATGC AGATAATATG CGACTTATAA TGGAAGGTCA CGTTTCAATA GCAAACAAA
AAGCTATAAG TAACAAGAA TAACAAACT ATAAATGTAT AGGCTCTACA TAAAGAAAAC TATAATTCCA TAAAGGATCT
AAAATAAAAC GNGTAAATG AAAGACAAGA TGTGTTGGA GATACGAAGA ATCCATGATT AAGTTAGAGG ATTCTTGGAT
GACAGTAGAG TAGAAAGCAC CAAGAATGAG TCTGTATACC CAGAGAACAC TTACGCTGGT AGGAATCTAT CTCATACAAC
TATTATGGAG CTCTCAAAGT ATACTG

SEQ ID NO:1660: (Length of Sequence = 240 Nucleotides)

GATAGAATAG CCAGCCTTCC ACTTGAATGC ACTGCCATAT TGTCAGCTG CATTCTTAA GCATCACTTC TTAGAGGCCT
CAAGCTTCTC GGGAAATGTT GATGACTTAA AGGGGAAATG AACAGGTGTC AATNATGCTT GTCAAGNTTC TTCTGTGAA
CCTCTATTG GACAATTCAC AAAAAAAG AAAGCAGCTC ATTTCTAAT TCAGGATATT ATTTCTTTTT AAAACTGGTA

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TCCACTCCAA GGGTTTCTGA CCCAAGAGGT GGGGACCAAA ACCATGCATT CCTAAGAAGT CCCCAGGTCA TGCTGCTGTT
 GCTGGACTGA GGACCACT TTAGAACCT GTGCTCTAAG TGAATACTTG GAAGTCGTTT CAGGACATGG GGCATAGAAA
 CTGAGGAGTA GCTGAGAGGA AAATGAAGAG AAGCTGAGAA GAAGCTGAGG ATCCTCACAG GAGCAGACAG AGAAATGTGA
 AGGGTGGGGT TTTATGINTG GGAAAGGGAC CGAAGCCCA GGCTGAAGAG TTTTAACTTT GGGCCAGAA ACTCAACCAT
 CAATGGAAAC AGGGCAGT

SEQ ID NO:1649: (Length of Sequence = 275 Nucleotides)

GCACCTTNAG GATTGAGACC CGGAAGGCTT CAAAGGCTGT CGCAAGGAGG AAGAACTGGA AGAAGTTCGG GAACTCAGAG
 TTTGACCCCC CCGGACCCAA TGIGGCCACC ACCACTGTCA GTGACGATGT CTCTATGACG TTCATCACCA GCAAAGAGGA
 CCTGAACTGC CAGGAGGAGG AGGACCCAT GAACAACTC AAGGGCCAGA AGATCGTGT CTGCCGATC TNCAGGGCG
 ACCACTTGGA CCACCCGNTG CCCCTACAAG GATAC

SEQ ID NO:1650: (Length of Sequence = 270 Nucleotides)

AAAAGCCAGA GGGATGAGAA TGAGAAAGTT AAAAGGGAGG TCAGGAAAGC CATCTTTTAG GAGAAATATA AATNGACAAT
 SCTTTAAAAA AGGAGCTGCC ATCATATTAT ACCCTGACCC AGCTGGATAC GAACAAATTC AGCCTTGGCA ATGCAAGTCT
 TACATCTATT TTATATAGAT TGTATAAAG AGAACTGGAA GCATTTTCAA GAGGGGTATG TATGTGTTG TGTGTGCTG
 GTAATTAATG AAAGAGAGGC TATTGAATTT

SEQ ID NO:1651: (Length of Sequence = 372 Nucleotides)

TCTTGCTTTT TAATTGTATT TCTAACACT AGAATTTTCT ATTCAAGTT TTGTACGTG GCCTTGCGTC TCCTTAGTAC
 ATTTTATAGT CGCTGTAAAT TGATTCCATT TTTCTTGAAA TTGAATTTCT ATCTGACCTA ATTTCTTCCT TGAATCCTAC
 ATCTCCTTT CTCAATGGAC GCAGTGACG AATGAAGCAT CCAGCAAAGC TTTGTGTGT GATTGTTTAG GAGTCAACC
 TGTTTTGTG GAAGTTGTCT CACAACACT TCTTTTCTG CTTCCTCTCT TTCATATGA CATGTGTTTT CTTCCTCAAT
 GGATTAACTT TATTGATCAT CCTTTGTC TTCTAGCAA AGACGGGTGC TT

SEQ ID NO:1652: (Length of Sequence = 314 Nucleotides)

TTTCTGAGTA TGCTGCACAT GATTATTAGC ATGTAAATA GTCAAAGGA CTGGAATAAA CATCAGGAAG ATTTCATAAA
 GTGGTGTAAAG TAGAAAAAA AGGTAAACA ATGAGCTGCA TGTGTATAAG TATAAGACAC TGATCCAAGT GGTGGCTTCT
 GAACCATGAT ATTACTTAAN CTAGAGTGT AAGGTCAGCT TAAGTCAAAA TAAACAAAG CTCCAAACC CTCATTTTAA
 ACACAGTAGA TAATAGATGA NTCTGTATC TTGGGAGATA GTACAAGCCA AANGTTACAG CTGTGTAAA ACCT

SEQ ID NO:1653: (Length of Sequence = 323 Nucleotides)

TAGATATGAT GGCTGGAGCT GCAATAGCTA ACTTGCAACT ATGAGGAAT ATAGGACTTT GGTCTTAACA TTCCTGAGCT
 CCTGAATCAA TACTTAACT ACCTCTATG AGACTTCTTG TCACATGAGA AAAATTAAGC CCCAAATTAA ACCCCTGCCT
 TINACTGTAA CTCTCAATTG AGCATAATTC CTAAATGNTT TAATCAATTC TACTCTACTC TGGCATGATT TTNAAGGCAT
 TAACCAATAT TTCTTCCA TCTAAAAAG GAACTANTAC TTACTGGAGT ATCTAGTATA CATCAGATAC TGTGTATATA
 GGC

SEQ ID NO:1654: (Length of Sequence = 352 Nucleotides)

ATCTTGGCCT GCAGGAACAT GGCAAGGGCG AGTGAAGCAG TGTCACGCAT TTTAGAAGAA TGGCATAAAG CCAAGGTAGA
 AGCAATGACC CTGGACCTCG CTCTGCTCG TAGCGTCAG CATTTTGTG AAGCATTCAG GGGCAAGAA GTGCCCTCTC
 ATGTGCTTGT GTGCAACGCA GCAACTTTTG CTCTACCCTG GAGTCTCACC AAAGATGGCC TGGAGACCAC CTTTCAAGTG

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TRCCGAGGCG TGAAGCACAA TITAKTTCAA CTGCCATKTK TTCCTTCACA GTAAGRCCTT CTGGRGAAG GAAGCAGTGT
GTTTGAAGTA TACCTTAGGC CAAGCT

SEQ ID NO:1642: (Length of Sequence = 295 Nucleotides)

AAAAGCCCCA GCCTCAGGAC CCCGGTCACA GGCACCCGGG GGTGGGGGTG ACCAGCAGCA GTTCAGAGGC AGGTGTGGGC
AATGTGGGCC TGAGTCTCCT NCCCACTCAC GTCACTNCCC GCGGGGACAC AGCGGCATTT NTGGGGCACT NGGCATGCCG
GGTTCCTAAC CTCAATTATT CATTCTGCTC TCAGGCACCT CCTGACGAGA CCTGGGCCA GGAGAGCTCG GCTCGGGGAC
AGAGGAATGA GACTCAGTGG GACGCAGAGN CCAACCCCAT CCCCACCCCT GGGCT

SEQ ID NO:1643: (Length of Sequence = 359 Nucleotides)

ATCATTGGTA GTTTAACTT TTCATCTAAT ATTAGATTGC ATGCAGGATT TTATATCTAA TTACTCTGGC AGATGGCCIT
TAGAAAGTTC AAAAATAAAA TGCAGCAATT CATATTGGCA GATTTACTAT TGAGACCAAT GCTTCTTAA CTAAAAGGT
TTGTTTAAAA TCGTTAGTTT AGGAAATCTG ATAAAGATTT TTGAATATCA GAGCGTTTAA AAGAGATTCT TACTTTACAT
CTGGCATATT TCTTGTTGTA CATATTATAA TTCCATTGGA ACATGGCTGT CTGTAAACT ATGTATATGA TCCGGAAGAG
ACTCAAATTA AATTAAGGTT TAACAGCCAT CAAGTTCAT

SEQ ID NO:1644: (Length of Sequence = 293 Nucleotides)

TGAACCCGGG NGGCGGASTT GCAGTCAGCC GAGATGGCAC CACTGCCTC CAGCCTGGGT GACAGAGCCA GACTCTGTCT
CAAGAAAAA AAAAGAATTA AAAGATGTGA ACAAAGCAA GAAAGTGCTG TATGAACGAA ACGGAAATAT CAATGAAGAG
AAATAAAAT TATAAATTC AGGAAATGAG ANGTACANTA NCAGNAAAT CACTGGAGAG ATTCAAAAGC ATATCTGAGC
AGGTAAAAA AGTAGTGAAC ATGAGATAGG TCAAGGGAAA AGTACTGAGT CTG

SEQ ID NO:1645: (Length of Sequence = 332 Nucleotides)

AAAAGCTGGA TATTAGGAAA TGTAATATT AATCTGAAT TTGTTACTGA CTCAGGATGA CCTTGCATGA TGCATCCAAC
CTTCTTTTCT CTATATCAGA AACTAAAGA ATAAATGTAA CATCACATTC TTTTCTCCTT TGGGACAAAC AACTATGTAC
AATTGAATAA AATGAAATT GCATAAGTNG TGGATAGAAT ATGTTTGGGT TGGTTTGAAC TTAGCACACT GTTTAATAAT
TCAACATTTT TTATACCTGT GCAATAAAT TTTAAATGAT GTCTGAAATG CTTTGAATC TTCAGAAACA GGTTTATAAA
TGGCATAAAA AA

SEQ ID NO:1646: (Length of Sequence = 210 Nucleotides)

GAAAGINCTC CCAATCACTC TCTGCACAAT GAAGTGGCGG ATGACTCCCA GCTTGAAAAG GCAAATCTCA TAGAGCTGGA
AGATGACAGT CACAGCGGAA AGCGGTGGAA TCCACATAG CCTGAGTGGC CTGCAAGATC CAATTATAGC TCGGATGTCC
ATTTGTTTCA AAGACAAGAA AAGCCCTTCC GAATGCAGCT TTGTTAGCCA

SEQ ID NO:1647: (Length of Sequence = 246 Nucleotides)

TCCACTCCAA GGGTTTCTGA CCCAAGAGGT GGGGACAAA ACCATGCATT CCTAAGAAGT CCCCAGGTCA TGCTGCTGTT
GCTGGACTGA GGACCACACT TTGAGAACCT GTGCTCTAAG TGAATACTTG GAAGTCGTTT CAGGACATGG GGCATAGAAA
CTNAGGAGTA GCTGAGAGGA AATNAAGAG AAGCTGAGAA GAAGCTGAGG ATCCTCAGAG GAGCAGACAG AGAAATGTGA
AGGGTT

SEQ ID NO:1648: (Length of Sequence = 338 Nucleotides)

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CAAACTCAC TTGACCCCA TTAAGAGGCA AGCCTGGCAC ATCTATCCCT GGGCCTTTAG AAAGCCATTT GCCTCAAATG
GCTATAGGGT TGIGGGGTGG AGGGAGGAAG GGCTGGGAGG GAGTNGGAG GAATTGCTAG CTGTAGTGTG ACACATTGTA
GTGTTTGCCA GGAAATGAGC CAGACATGGT GGTGTATGCC TGTAGTCCCA GCCACCCAGA AGGCTGAGGC AGGAGGATCG
CTTGAGACCA AGAGTTTGAG CCTGCGGTA GCTGTTAATG ACCACGGCAC TCAAGCCTGG GCAATGTAGC AAGATCCTGT
TNTCTACAAG AAATTTTTTA AAAATGAGC CAAGTTTGGG TGGTGCATGC CTGTAGTCC ACTA

SEQ ID NO:1636: (Length of Sequence = 362 Nucleotides)

CAAAATGACT GACTACAGCA ATGCTTCCG TGIGCCCCAC ACATCATGAG CACCGCAAGA GACAAAAGAT TAACTATGAA
ATATAGTAAT CTAAGCAAGC CCACACATAC ATATTTTTGG GGATTTCCCA CCATCCTGAA TAGTATCACT GCAGTTGACA
CAACTTCCAG GGAAGTGCAG AGTAAGTGT TAATATTATC CACGAGAAAG CAAAATAAA TATTAGTGTG CACATTTCTG
AATGAGAAAC TAATTGCTTC ATTGATTICA ACAATGTAGT GGNAGNAAAC TATTTAGAT CTCTACAATG CCTAAATGCA
TTCTATTTAA ACTCAAGGTA CTATTTTCAT TTTTACCATA CT

SEQ ID NO:1637: (Length of Sequence = 205 Nucleotides)

GGGCCCCGAC GAGGCTCAGA CCTCTTNTAC GNCAGTACT ACGAGGACGG CGAGGTGGAG GAGGAGGCG ACAGCTGCTT
CGGGGACGAT GAGGATNACT CTGGCAGGGA GGAGTCTTNA CACCACCAGA ATAAACTTGC CGAGTTTANC TCACTAGGGC
CGGACCGTG GCTCCTTAGA CGACAGACTA CCTCAGGAG GTTTT

SEQ ID NO:1638: (Length of Sequence = 253 Nucleotides)

CACTCAGGCT CACGCTCCTG CTCTCTGCAC CAGCCTTCC AGAGCATNCC AGTNCATG GCTTCATCTG TTAAGTGTG
ATCACCTCAG TCCTGATTTT TAGACCTAAA TGGTTTCCCT AACGCCATTC TAACTGCCCTG TGACTCATTT TCACTTACAG
TGTTTATGT AACGCCAAAC CAACAAATCA CAGGTGCTTG CTCTGTCCA TAAATCTCCC CAGTCTAACT TTTTGTCAAT
CAACATGRCT CGT

SEQ ID NO:1639: (Length of Sequence = 360 Nucleotides)

TGTGGCCAAG GACCCTATCG TCAATGTATG GTACTCTGTG AATGGTGAGA GGCTGGGCAC CTACATGGGC CATAACGGAG
CTGTGTGGTG TGTGGACGCT GACTGGGACA CCAAGCATGT CCTCACTGGC TCAGCTGACA ACAGCTGTG TCTCTGGAC
TGTGAACAG GAAAGCAGCT GGCCCTTCTC AAGACCAAT CCGCTGTCCG GACCTGCGGT TTINACTTTG GGGGCAACAT
CATCATGTTT TCCACGGACA AGCAGATGGG CTACCACTGC TTTTGTGAGC TTTTTTGTGAC CTGCGGGATC CGAGCCAGAT
TGACAACAAA TGAGCCCTTA CATGAAGATC CCTTGCAATG

SEQ ID NO:1640: (Length of Sequence = 321 Nucleotides)

GTTGGGAGCC CTCGCTTGT TCCGTAGAGC AATGTCTTCT CCATGGGGCA GCATNGGCC TGGATGGGCC TGAGCATAGC
AGACCACTG GTACATGTG CATGTGTGA CATGTGTGCA TGTGTGGATA TGTATGCTCC TGAGTGTATC TGCATGTCTT
NCTGCACAC ACAGTGTCTC CCTCGATGC TGCCAGCCTG TGGTGGACTT CCTCTTCTGA CCCCTTCTT GCNCCGGNC
TGTTTTATCA GTGAAAGGAC TTAATAAGC AGATCTCCAG GTTCACCTTN TGGAACTCAG CTCAAGGTA GCACAGCAGG
T

SEQ ID NO:1641: (Length of Sequence = 266 Nucleotides)

GGTGGTGCCA CTGTCTGAT AGTTTTTCCC ATCTTAGTAG CCGNACCCAT AATTAATGCC TACTCACATC AAGTTAGCAC
CACTCAAATG TGGGCCATTC ACAGGCAGCC AGGGATCCTC TTGNCCTG AGGTGGGGG CTTCATCAG AATGCAAATC

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ATAATGATTTC CACTTGTGTCAT GAACACCATG AAGGTATCTT GGCAGCCAGA GTCACCTCTG TTCCCGAAGT GGGAAACCTN
GGGAGGGTCC TCAAAACCCC T

SEQ ID NO:1630: (Length of Sequence = 380 Nucleotides)

CATAAAACCA TCCTACGATG TGCTGCTGCT GCTGCTGCTG CTAGTGCTCC TGCTGCAGGC CGGCTCAAC ACGGSCACCG
CCATCCAGTG CGTGGCTTC AAGGTCAGTG CAAGGCTGCA GGGTGCTCC TGGGACACCC AGAACGGCCC GCAGGAGCGC
CTGGCTGGGG AGGTGGCCAG GAGCCCCCTG AAGGAGTTG ACAAGGAGAA AGCCTGGAGA GCGTCTGTG TGCAAATGGC
CCAGTGACCC CCAGACGGG AAACCGGGTG GCAGCGCCAG CCTGGGCCA GGCATGGAAA CGGACAACCC CTAATCGCCT
TAGCTACTGC TTCTAACAACT TCCTTCCCT TGTGTTAAGG GAAACAGGT TCAAGGGGG

SEQ ID NO:1631: (Length of Sequence = 383 Nucleotides)

AGAGGATTTA TTGGACAGG GCTGTGCTGA GAGTCCACC CTCACCCAC AATGGGGGG GGCCTGGCA TCGAACACCA
AGCTGAGTGA GAAGGGCTCC TCCAGGCTC GCAGGAGCT TGCTGGCTTC TCCTGGCTCA CAGCAGACTG GGCCGACTC
CCATCGGAGG AAGGCCAGCA TCCTAGGGCA GCCAGTGGAG GGCTGGCAGA GGGCTGTGCC TNGAAGGTCA CTGTGCTATC
TTCCAACCAC ACTGTGTGAG TCTCAGATAC CATATGTGGA ATCTGCATCA GGAAGGTCAA CTGAGGTCA TTTTAAAGG
GATTCCTCCG GNAAGAGGAG CNGCGCATCG GCGGCTTAA NCCGGCGTT CGGTTTCATCC CGA

SEQ ID NO:1632: (Length of Sequence = 424 Nucleotides)

GGGAAGTGAG CTCCTGAACC AACTCTGAAG GAGACACCCA CTGCTAAGC CAGTCTCACT CTAGGACACC TGCTAGCGA
CCAGCAAACC TGAATGAAA GGGCAAGTTC CTCAGTCCCC CCTCTGCATC AAAGGGAGTG GCTCTGCCCT CTCTAGTCTC
TGACTACCTG CTAGTGATT TTGCTTCTG TGCTCCAGA CCCAAGAAA CCACGCTCT TTTCTTCTT CATGACTCA
TCCCCTCTT ACCCTATATT GTCTCCTCCA CTCTCTGCT CTGCTGGCCA GGCTTAAATC TGGGCCACCA GCCTTCTGG
GACATACCTA TTCCGCAAC TGAACCTTCC CAACCCCTAG GAAACAAAG GTATTTTACA AGGCTCTGG ACCTTGACC
AAAGAGGCAT GNACCATAT TACT

SEQ ID NO:1633: (Length of Sequence = 417 Nucleotides)

TTTTTCTAC AGCATCTTTT TATGTCTTT ACCATTACTT TAATGCATT TAAATTTAT CTACATTAAT TGGGAACAT
TGCAATTTT TTCATCCTCT CTCCTTTTIN CTTTNCITT TTTGGATT GTCTTGCCA GAGAGGTTCT CCAACACCCG
GGTGGACTTG GAATTTTTTA TCAGCTGCAA TCTGAAGACT TGCTTTACT GTGAATAGG TGACATTCCT TTAGGACCTC
AGAAGCTCAA GTAGTTTAAT GCCAAGTCTT TCCAGAGCCT CACTCTCTT TATTTTTTAA ATTAGAATG TGATTTATG
AAGNCTTACC ATGGGGTTCA TATAATTTNT NAATNGANCA GCTTTATGA GGTATAATC AATACCCCTT TAAAGNATGT
AACCCGTGGG TTTAGAC

SEQ ID NO:1634: (Length of Sequence = 423 Nucleotides)

AATATCCCAA ATGTGCAATG CATCACCTGA GACAGAAGGC AGAAAGCATC AAGCTCTCTG TTTATCCCAA TTCAATGACA
ACCAGAACTT ATTTTTTTG AGATGGGGTC TCGTTCGTC GCCAGGCTG GAGTGAGTG GGGCATTCAT GGCTCATCGC
AGCTCCAAC TCTAGTCTC AAGCAACCTT CCTACGTCAG TGCTCTGAGT AGCTGGAAT ACAGGCATGC ACCACCACAC
TTGGCTCATT TTTAAAAAAT TTCTGTAGA GACAGGATCT TGCTACATTG CCCAGGCTTG AGGTGCGGTG GTGCATTAC
AGCTCACCGC AGCTCAAAT CTTTGGTCTC AAGGATCCT CTTGCTCAG CTTCTGGGT GGTGGGCCCT CAGGCATACA
CCACCATGTC TTGTCAATT TCT

SEQ ID NO:1635: (Length of Sequence = 384 Nucleotides)

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CTCCCAAAGN GTTGGGATTA CAGGNGTGA CANCCGTGCC CAGCCGTNAA GTTAAGATAT TTTAAAAANA TCTCTGCAAG
TTGAGGAAGT NTTTCAGGAC TCTTCTCTGC TTAGTCTCAC T

SEQ ID NO:1624: (Length of Sequence = 350 Nucleotides)

CTTTGTGAGC TTTTGTGACCT GCGGGATCCG AGCCAGATTG ACAACAATGA GCCCTACATG AAGATCCCTT GCAATGACTC
TAAATCACC AGTGCTGTTT GGGGACCCCT GGGGGAGTGC ATCATCGCTG GCCATGAGAG TGGAGAGCTC AACCAGTATA
GTGCCAAGTC TGGAGAGGTG TTGGTGAATG TTAAGGAGCA CTCCCGGCAG ATCAACGACA TCCAGTTATC CAGGGACATG
ACCATGTTTN TGACCGCGTC CAAGGACAAC ACAGCCAAGC TTTTGTGACTC CACAACCTCTT GAACATCAGA AGACTTTCCG
GACAGAACGT CCTGTCAACT CAGCTGCCCT

SEQ ID NO:1625: (Length of Sequence = 333 Nucleotides)

GTCTTCTGTG AGACAAAGAA ATTATAAAGA TGGCAGAAAT TATTAGCGAC GTTCTACCTC TATAATTAC GTTCCATGAA
TCAGTACTTC ATTCTTTTT TATGGATGAA TTAATATTCC ACTGTACAAA TATACCACAT CTGTGTTTTT CATTCGTCTA
GGTTAAAAA TTTTATTTT TATTTTATT TTTTGTAGA GACGGGATCT CACTGTGTG CCCAGGCTG TCTTGACCTC
CTGGGCTCAA GTGATCCTCC CACCGTGGCA GTCCAAAGTG GGTAACCTGT ACGCTGGTCT GAAAGACCTT GCTGAAGAGA
GAAGAGGCAA GCT

SEQ ID NO:1626: (Length of Sequence = 314 Nucleotides)

GACTGTCCGT GGACACTGGT TTTTAAGCCC AAGAACTGAA TATACAGTAG CAGTGCAGAC TGCCTCAAAA CAAGTTGATG
GTGATTATGT TGTGCTGAA TGGAGTGAAA TTATAGAAAT CTGCACCGCA GACTATTCAA AAGTTCATCT AACACAATTG
TGGAGAAGG CTGAAGTGAT TNCAGGACGC ATGCTTAAGT TTTCTGTTT TTATCGTAAT CAGCACAAAG NATATTTTGA
CTATGTTCCG TAAGNITCAA AAATATATAG TGATTTGTTT TACTAAATAT AGTTTCAAAT TCTAGGCTCA GGGT

SEQ ID NO:1627: (Length of Sequence = 375 Nucleotides)

CCCTGGGCAC CTGGTACCTG GGGACCTACA AGGTGGTGAG GGAAGGGTAC GAGTACATTC CTNTCCCTC TGACCTGGGC
GCTAGAAGGG CAAAGAACCC GAGCCTGCCA GCTTGGCCTC CTCCACAGC CTCCCTCGGA GGCATGCCAT GCCAAGCACT
CTTCTGTCT CTGTTCATGA ATAAAAGAGA TGGATGGGCT TATCTTATA GAGAAGTGAA TTTCACCTAC TCCCTGGCC
CGAAAACCTAG ACCAAATGAG GAAGTGTCTT AGCTCATCAA ACTGTATAT TTATTTTCAA CAATGAAAAC AACACAACAA
AGTGGAGTCA ATCCACTAAT TTTTAAAT CTAACACAAT TGTTTGCACA ACAAT

SEQ ID NO:1628: (Length of Sequence = 434 Nucleotides)

TGCACAGGCA CACCTCCACT CTTTATATCA TTTCTCCAT CTTTCATTTC CCATCTGTAC CTCCAAAATT TTGCTATGAA
TCTAATTCAT CTTTGTCTC TCTCTCAT GGGTGCCCTT GCTTCGCCA GTCTTCTTC TCCTGCCCA CCCAACTTC
ATGAATTAGT CTTTCTCCC AGGAGCTCTG ATTCTAGAC TGCTTTGAAA ATGCTGTATT CATTTTGCTA ACTTAGTATT
TGGGTACCT GCTCTTGGC TGTTCTTTT CTGGAGCCCT TCTCAGTCAA GTCTGCCGA TGCTTTCTT TACCTACCCC
TCAGTTTTCC TTAACACGNG NACACAACCTC TGGAGAGTGT TAAGNATAAT GTTACTTGGT AATGTGTATT TATTGAGGAT
TGTGTGCTA AGAATGNGTA GGTAAATA GGG

SEQ ID NO:1629: (Length of Sequence = 341 Nucleotides)

CCTCAAAGCT GCAGGAGGT GGGGGTGCC GGCAACAGG GTGGGGTCC CATCCGTAC CAGTGACAGC AGCCTCTCT
CTCCACGGT GGTGCTGTT TGGGGCTGTG GCCAAAGTGT TTGCCCGCC CTGACTGTN TCCTTCGGGA GCTGCCGAGG
ACTGCAGAGA GGGCCTGGCT TGTCCTCTT AGGAGCAGCT GGGNNGTGT CTGCTGCA TCCCCTTCA ATGGTTGAAA

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TTTCTTCCAT GCAACANTCT GNAGACTTAA GTGGCTTTCT NCTGTACTNC CATAGAACCC ACCCAGTACA TACCTCCAGT
 GNCGCACTGA TTTTATGCTA TACATATGAC TGTGTGTTCA TCTCCTCCAC CAGACTGTGA GTCCCATGG AGTAGGAAC
 AAATTTTINT CAACACTCTG TCTTCATCAC CTCGTGTAGT ATCTGTGACA GAGTAGATAA TGATTAA

SEQ ID NO:1618: (Length of Sequence = 362 Nucleotides)

GGAAGSTTTT TAATGCATGA NGTATACTTG TNATCCTGGA GGTGGGAAA GATTGAGTAA AGATAAAGTT TGGCAAAAAT
 GATTCTCTCC CTAGGATTG GGGATATGTA AATCAAACCA AAGGCACATT CTGCAGCTCA CAGCAACCTT CATTTTTTGT
 CCTAGATTGA GTTATCTATC AAGAATCATT CATTCCCTCT CAGCCCTTGC AACTGTTTCC TATGACTTTG GACTTGGCCA
 TGCAACTTGC TTTGGCCAAT ACAATGTGAG TTAATGTGCT TTAAGTGCAT GTAATTAGGT CAGTCCCTCC CTCCTTGAGC
 TTCAACTCTC CACCATGAGG ACAACATTGC CTCCTTCTCT GG

SEQ ID NO:1619: (Length of Sequence = 344 Nucleotides)

GCAACCTCAT CCCAGGTTCA AGINATCTC CTGCTCANC CTCCTGAGTA GCTGGGATTA CTGGGCGACC ACCACACCCG
 GCTAATTTTG TATTTTATG AGAGACAGGG TTTCGCCATG TTGGCCAGGC TGGTCTGAA CTCCTGACCT CAGGTGATCC
 ACCCACTCA GCCTTCCAAA GTGCTGGGAT TCCAGGCATG AGCTACTGTN TGGCCCAA TCTTTCTTAA GTTGTGTCTG
 GCCTTTGGCA GAAATAGCCA CAAAGNCAGG GTAGGAACGT TTTACTCTC AAGTGATGAT GGCATCCGAT AANCTTTTAG
 AGGGAGGTTT TTAAATGCA ACGT

SEQ ID NO:1620: (Length of Sequence = 379 Nucleotides)

GCCAGCGGAA GCTCCTCAGG CTCCCACCT CTACAGCTC CTTCTGCTCC AGCCCACTC ACCAGGCCG AGTTCCACCC
 TAGCACCTTC CCTGGGAATN ATCTCCCCCT GGTGGCTCT TCTACTTAT TCAGCCTCAA ATGINATCTC CACTGANAGG
 CCTTCTCTGA CTTGCTGAGC TTGATCCCT CCCCTCCCA GTNACATTAC TCCGTGTTAT GGTACCCATC CTTGTCTCCT
 TAGCTGTGTT TTGTCTGTAT TGGCTCTCC ACTAGACTGT AAGCTGCATG AGGGCAGGG ATGTCTGTTT AATNCCAGTT
 GCTCAGGATA GTGTATGGCT CGTGATAGAT GCCTAGNACA TTTTAAATG GGGACGGAT

SEQ ID NO:1621: (Length of Sequence = 283 Nucleotides)

GATTTGGGG CTGGGGAGG CAGAGAATCT CTTGGGAGTC TTGGGTGGG CTGGTGCAAT CTGTTTCTC TTGATCTCAA
 AGGACAATGT GGATTNGGG ACCAAAGGTC AGGGACACAT CCCCTTAGAG GACCTGAGTT TNGGAGAGTG GTGAGTGGAA
 GGGAGGAGCA GCAAGAAGCA GCCTGTTTC ACTCAGCTTA ATTCTCTTC CCAGATAAGG CAAGCCAGTC ATGGAATCTT
 GCTGCAGGAC CTCCCTCTAC TACTTCTGT CCTAAAAATA GGG

SEQ ID NO:1622: (Length of Sequence = 356 Nucleotides)

TTAATTTTAA AGCAGATAAT ATTTCAAATA TTTCTTTGA AATAGACCAT TGTCTCTGCC TTGAAGTATG TTAGTACATT
 TTAAGAAAGT CAGTGGGTTA AGGAGTCAGT GCTGTTAGTA TTCATGCTTA AAACACTTCC CTTCTACCTA CCTAATAAA
 TGAGGGGCTC AAGAGAAATA TTCTAATTC TCTAGCGACA TGGCTAATTT TTTTTTTTAA TGTATTTTGT TATTTTATG
 ACAGATGGAG TTTCACCATG TTGGTCAGGC TGGTCTCAA CTCCTGAGCT CAAGTGATCT GCCTACCICA GGCTCCTGAG
 TCACTGAGAC TGTAGTTGTG TGCCACCATG CCAGGT

SEQ ID NO:1623: (Length of Sequence = 361 Nucleotides)

TTTGAGACAG AGTCTCGCTC TTTCGCCAG GCTGGACTGC AGTGGCACTA TCTCAGCTCA CTGCAAGCTC CACCTCCCGG
 GTTCACGCCA TTCTCTGCC TCAGCCTCCC GAGTAGCTGG GACTACAGGC GCCCGCCACC ACGCCTGENT AATTTTTTGT
 ATTTTTAGTA GAGACGGGT TTNACCATGT TAGCCAGGAT GGCTCGATC TCTGACCTC GTTGATCCGC CTGCCTCGN

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TGGAGATATA GAGGTAAACA AGTCTGACAT GATCTATGCT ACCACGGAGT TCTTATTTTC AAAGTGAAG GTAGAAAATA
 AATAAAAATG ANCTAGAAGA GCAAAGTGCC TCTGAATGAG CATGCAGANG CATGTTTTCA AAATGTCGT GNGTGGGATA
 AATAGATCAG CAACACACCA GGCCATGCAA TTINGCAGCA AATCATTCT GCACTCTAGC TGCTGTTTTT CCTACTCTGG
 AATCATACTC CCCCCTTCGG TCATCTINTGC CAGTTTNCCT GNGCTTCACC CTACCCCTCN TTTTN

SEQ ID NO:1612: (Length of Sequence = 458 Nucleotides)

ATGAAATTGA ACAACCTAA AGAGAAATGT TCTTACCGTT CCACAGGAAC CAGCTTCTTC CACTGGGCCA CTAGGTCCCT
 GGCAAAGCTT CCAACATGCT CGTGTTCG CAAGCTATTT ACTGTTTTCC CAACCCCACT CTCTAAAT TTGACAAAGT
 AATTGTTAGA GGGGTCTGGA ACTAGGCTAA CGTTTTCTA AAGAAATAAG GCTTTCTACT TTGAGAACT CAACAAGCAA
 TACTTCCTTC CTACAACATA CCTGCAAAT CTTAACACTA AATTACTTTG TGTCTATGNC CCAAATCTCT AATGACACAC
 AGTAGCAAAG NGTACCAAGT TCAGAACTTT AATAACAGNG GTNATTAGGG CAGGTGTTAG GGCACAGNT AAGNGCTTTG
 CATCAGTTCT GGATCAGNCT TTTAAATAAC COCTTAAGNG GGGNTAGNC CCTTTTTT

SEQ ID NO:1613: (Length of Sequence = 322 Nucleotides)

ATGTGGAGAT TGTGTGGG CTAGGGCAGT CCAGAGGAGA GATATGTGGC AGGACAAGTC TCTACCTTAT ACAAGINCTT
 CCGGCAAGCC CTCAGCATAT GACATAGGCC CAGAGAAGGA TGCAAGAAT TCTGGTCATA AATGTTTTTC AAATATCAAA
 TAAATCATAT GTGCACATGC ACAACATGC CTTCACACT GAGTAAACC AGACTCACCT TCAAATATAT CAACAGTTTT
 NTCAAGCGCC GTTAAAAATC AGGCATCGGA CCTCTGNNIN CGAGAGCTGG TTNATGGGG AAGTTAGATC AACCCGTCAT
 CT

SEQ ID NO:1614: (Length of Sequence = 280 Nucleotides)

AGTATCAAGG GATAAAATAT ATTTTAAATT TTGTATTICA CTGAAAATT GTAAGNCCA TTTTATAATG TATGCTTGC
 AAAATAAGTC ATGGAAGCCC TGAAAAATTA GTCAATTAC TAATCAAGA AACATATATT AAAGACCTAC TATGCATGAG
 GCACCATGCT AATTGCTTTG AAGAAGACAA AGTTGAATTA GACAGGNTC CGTTTACAA GNTATTTACA ATGCAAAGGG
 GGATACAAGA CATATAAAG GCTATGGAAC TGCCCTTCOG

SEQ ID NO:1615: (Length of Sequence = 393 Nucleotides)

GCGTGGTGGT GCGTGCTGT AAATCCCAGC TACTACGGAG TCTGAGGCAG GAAAATCCCT TGAACCAGGG AGTCGGAGGT
 TGCAGTGAGC CGAGAGCAGC CCACTINACT CCGCCTAGC GACAGANTGA GACTCCGTCT CAAAACAAA CAAAACAAA
 CAAAAACCA AAAACACTGG GAGTCCAGT TTGTAGGAAA TCATTAAGAT TTTATTATT GAGCTCCAGA ACGAGTGAGG
 ATGACCTGAT AATTTTGGTT TGGCTCAGGT TGTAAATGTT TCTGTTTTG CTCGATGACT ACTAGAACAG TTCTCAAAT
 GTGTGGTGGG TAAGAATCAC CTGGGGACTT TGACCAAGIN ACATGTCTAC AACACCCGGC CCTACAGGC TCT

SEQ ID NO:1616: (Length of Sequence = 353 Nucleotides)

CCACCCAGC CTCCTTGAG CTATCCCTTT CTATCCCTCT CCATCCAGCC CCTGGCCACC ACCATTATAT CTATTCTGGA
 ATTCCACAG GAAAGCAGG CACTTTATAA ATCAGCGAGG GATTCAAGGC GAAATGAGAC TGTTCGTGAG TNATGGGGIN
 CCGGGTGTCT TGCCGTGCT GCGCGCCGNC GGGAGAGCCC GGGGAGAGC AGAGGTGCTC ATCAGCACTG TAGGCCCGGA
 AGATTGINTG GINCCGTTC TGACCCGNC TAAGSTCCCT GTCTGTCAGC TGGATAGCG CANCTANCIN TTCTCCACTA
 GTGCAATCTG CGATATTTT TTTTGTGTA TCT

SEQ ID NO:1617: (Length of Sequence = 227 Nucleotides)

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GACAGACATT CAAACCATGG CAGGTGGCAA GAAGTATCAA ACTACTAGAT CCTTGGGATT GINCTTTGTA CTGGGGTGTA
TTTTTNCCAA CAATCCTAAA AATCATATGA ATAGAGATAG CAATATATAT CTNACCCATT TGGAAATGCA CAGAGATTCA
GGAGTGTTC CATAGAAACA GAAGATCATT GGCTTTTGTC CATTCCCAAC GCCAGNAATC TGTTTCCTT GACTCTTTTT
GATCTGTGTT TCTGAATGTT TTGATATACT GCGCCTACTG GGTGTGCAGG

SEQ ID NO:1606: (Length of Sequence = 290 Nucleotides)

CTCACTTGGG TACTACAGTG TGAAGCTGA GTGCATATGG TATATTINAT TCATTTTGT AAAGCGTTCT GTTTGTGTT
TACTAATTGG GATGTCATAG TACTTGGCTG CCGGGTTTGT TTGTTTTTGG GGAAATTTG AAAAGTGGAG TTGATATTAA
AAATAAATGT GTATGTGTGT ACATATATAT ACACACACAT ACACATATAT TATGCATGTG GTGAAAAGAA TTGGCTAGAT
AGGGGATTTT CCGAACACT GCAAAAATAG AACGTAGCAA AATGGCTTCA

SEQ ID NO:1607: (Length of Sequence = 365 Nucleotides)

GCTCCACTGA CCAGCTGTTC CCTGTCTCTC CTTCCTCTTG AGCCTCCCTC TTCCCTGAGA CACAATAATA TTAAATTTG
GCCAATCAAT AACTCAACAA TGGTGTCTAA TAATTGTTC GGTGCGAGGA AGAGGCATAC ATCTCTCACT TTAATCAAA
AGCTAGAAAT GATTAAGCTT AGTGAGGAAG GCATGTCAA AGCGAGACA GACCAAAAGC TAGGCCTTTT GTGCCAGTTA
GCTAAGATGT GACTATAAAG AAAAGCTGTC GAGGGAAATT TAGAATGGTA CTCCAGGGGA ACACACAATG ATAAGGAAGC
AAACAGCCTT ACTACTNGGA TATGGGGAAA AGTTTTCAGC TTTGG

SEQ ID NO:1608: (Length of Sequence = 294 Nucleotides)

CTCAGGAAGC CTCCTTTCT TCACCTACCA TTACTAACTC TCCAAGCATA GAAATCCCTG GGAATTGCGA GAATAACTCC
CACTATTTTA AAATTTATAT TCAGATTTGT TTCGTTTCAT AAGACACATC AAACAGGCCT ATACAAAAGG TTTAGGAAAA
GAAACAATG GTGAGTCCCG GCCCTCTTCG AATTCAGTGG CACCTCATGC AAGTNTAGGA AGGCACGCTG GATCGTCTAT
CTGATTCOA AGCTGTCTT TGCCATCTCA TCCCTTGNC TGCCCCCAA CCCT

SEQ ID NO:1609: (Length of Sequence = 393 Nucleotides)

CAAAAGCTAA CTCCTAATAA GAAGATGAGG AAATAAAATC AGTTCAAAAG GGAGGAATAT GCATTCCCAG AATTAAAGGA
CCCCGGGTCC AGTTTGAGGA GGAATCTTGG CCAGATACAA GCCCTTGTA TAATNCTCAA GAGGGAGGAG ACCTTATTTN
CTCCTTGAG GTGTCTAGTA TGAANCTGC TTATTTTGAA ATGTGATCT AGCCATTATC AGNGCAACT GCAGATAATT
CCCATTTACA GAGGAATGCT GCTAACAGGT GTGGGNGGGA GCAGCGACAN CGNAAAATTC TGCTGTCTATA GGTACGTTT
ATGTTGGTTT TCTTTGAAAA TCAAGGGTA GAAATTTCA TGCCTCTAGA GGAGAGAGAG GAAACACATG AGG

SEQ ID NO:1610: (Length of Sequence = 464 Nucleotides)

TGCTGTATT TATTAAATTG CCTTACTAC TTTTAGATGG CCATACGTTT TCAAAAGCAA AGACCTAGTA AGCCATTGT
GTTCATTGTC TAAGCTATCT TAGGTACAGG TCCAGATTAT AAATGTTACC TGCTAATCAG AGAGCAAATT TTTAAATTAA
TCACTTGTA ATCCACATTA AAAGAAAAG AAACCTAGAA AAACACATAA ATTTCTTTTG TGATCCCACT ATTCAGGAAA
ATCCATTGAA AAAGCAGATG ACTTATCCGT GTTAAATTTT TAAAGNCCCT ATTTAACTG TCATGTAAAT TCTNATTTAT
CTAATTTTTT AAAACACATA TAGNNTTTTA CTCTCCAGTT CCATAANTEN CTCANTCTG GTGANGGTCA TTACAACAGN
CATTACGNGG GCATATCGGN NTAAAANGGC CNTGCGGTCC TGNATCNGAG NGGGGGTTAA GGTC

SEQ ID NO:1611: (Length of Sequence = 465 Nucleotides)

ATAATTTAAA GAAAAGAGAA TTCTACAATG TAAACCCCTT TAATATAAGC TGTTTTAATA ATTGGAAAAC AGAATGANTA
NTGTTTTINT TTGTCATGCC CAATTATTC ANCAAGTTT TATTAATAAC TIGCTACATG GTAGGCACAG CTGTAGGTGT

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TGTATTGCTA ACTGTCTTTG TAACTAATTT ATGTATACNC TAAATGGTAT AGCATGTGAT TTTATTATAG TTGATTAACT
 TTGTAATTNC TGTAAGTCA TOGATATCCC AGTCTACCTG GAAAATTAAG TCTATTAAAC ATAGTTGCTG TGGGAGACAG
 TACTATTGCC AACTGAAGCC TGAATCCCTC ATTTATTTTG TCCCCAGTTA CAGAGTGGAG GTTTAGAGGA GTGGGGTTAG
 ATAATGCTCA GATTAGAAAT ACAAAGGCAG CTGTCAGATC CTCCCATTTT ATTTGTTTGA AGGAAGTGAAG GTTGGTAAAC
 ATCACAAGNG CTAGTTAACT GGTGAGTAGC AGCCC

SEQ ID NO:1599: (Length of Sequence = 313 Nucleotides)

GGAGGTGAAG GACACAGTGG ATGGGCAGAG GNTCCTGGAG AAGAAGGGCA GTNCTGCNCT CAAGGACCTC AAGCGGCANT
 GCATTTGGAG CGGAAACGGG CAGATAAGCT GCAGGAGCGA CTNCAGGACA TCCTCACTAA CAGCAAGAGC CGCTCAGGCC
 TTNAGGAGCT GGTTCCTCA GAGATGAAGT CACCAAGCCG GACCCAGACA GGGGACAGCA GTAGCATCTC CTCCTTCAGC
 TACCGGGAGA TCCTTGGGA AAAGGAGGAG CTTCGGCTTG TTCCAGCCAG GTCTTATCC AGCAGNCCTN AAG

SEQ ID NO:1600: (Length of Sequence = 277 Nucleotides)

AGTTCACAGA ACTCCAATTC TTTATTAAATC ACAGCTTGCT CACAATGACA TACAGGAAAA TAGCACTAAT GAAGAGTAAA
 TATGCAGGCA GCAACCTTCA GGAGTTGGGA GTTGGGGAGA AACGACTTCA AACTGCGAT AGGTACTTAT GTTGGGTATC
 TGGTGATTCT TAGTTGGCAC AAATGCCCTG CCTAGCCCCC TTAAGTGGT CANITTCACA GATGGAGTGT TTTGTGTGTG
 GTGTGTGTAG TAGGCAGGAT TGCCTTACAC TGGGGGA

SEQ ID NO:1601: (Length of Sequence = 228 Nucleotides)

TTGAGACCAT CCAGGCTAAC ACGGTGAAAC CCGTCTCTA CTAAAAATCC AAAAAAAAAA AAAAAAATT AGCCGGGCGT
 GGTGGCTTGC GCCTGAAGTC CCAGCCACTA AGGAGGCTGA GGCAGGAGAA TGGCATGAAC CTGGGAGGCG GAGTTGCAGT
 GAGCOGAGAT CGCGCCACTG CACTCCAGCC TCGGCGACAA AGCAAGACTC TGCTCAAAA AAAAAAAA

SEQ ID NO:1602: (Length of Sequence = 299 Nucleotides)

GGAAGTCCTT TCTAATGAAG AGGGGAGATG TTATCGATTA TNCATCATCA GGGGTTTCCA CCAACGATGC TTCCCCCTG
 GTTCCTATCA CTGAAGAAGA TGAAAAATCA GATCAGTCAG GCAGTAAGCT TCTCCCAGGC AAGAAATCTT CCGAAAGGTC
 AAGCCTCTTC CAGACAGATT TGAAGCTTAA GGGGAAGTGG CTGCGCTATC AAAAACTCCC AAGTGACGAG GATGAATCTG
 GCACAGAAGA ATCAGATAAC ACTCCACTGC TCAAGGATG ACAAGACAG NAAAGCCGA

SEQ ID NO:1603: (Length of Sequence = 263 Nucleotides)

AAGGCAAGAA ATTAGCCTTG TTAAGAAATTT TAAGTGTAAAT GGGAAGCCAT TAGAGGGTTT TAAACAAGGA AAGATGTGAT
 GTGACTTATA TTCTAATAGG ATTGCCCTGA TTCACCTATG GAGAATGGAT TNNITGGATC TCAGTACTGG GATACTGAGA
 TCCAGGGGG AAAATATCAC TAAGGTGGA ATTGCTTTTC TGCACATTAA AAGCAATTCT CTTTTCTCTT GAAACCTCCA
 TGTGATGTAA ATTAGGGTAA ATG

SEQ ID NO:1604: (Length of Sequence = 260 Nucleotides)

ATGAAGACGT ACGACTTAT TTTGTGTTCT GAACATAAGT NCTTTGTCAC ATAAATGTG CTATGAATGT TGAGTTTTAA
 ATACTCGAGC GTGACTCAC GCCTGTAATC CCAGCACTTC GGGAGGCCAA GGCGGGCGGT TCACCTGAGG TCAGGAGTTC
 GAAACCACTG TGGCAACAT GGTGAAAACC CGTCTCTAC TAAAAATACA AAAGTAGCGG GGTGTCGTGG CGTATGCTGG
 TAATCCTAGG GTTCTGTCA

SEQ ID NO:1605: (Length of Sequence = 290 Nucleotides)

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SEQ ID NO:1592: (Length of Sequence = 299 Nucleotides)

GGAATTCCTCA AATTATGGGT AGTCCAAAAG CCAAAGGCAA TGTGAGGAAG GACACTCCCC AGATAAGAAC AAAAAACAGAA
ATCTGTATGT NCTATGTGTT ACACACAGTT GCGAATAATC AGATGTACAC ACATGATGCA AAGGCACGCC GCTACACATT
TATGTGATAT TCAGACATAT GTTCAAATAG AGGAGGTGAA TATCTTTTAA TAAATACAAT TTAGCAAGTA CAAGAATGCT
GATCAGCTGC AGCTCAAGAG GAAAGGGGGG AAAAAATCTT ATGGGAAATT ATTAATACT

SEQ ID NO:1593: (Length of Sequence = 378 Nucleotides)

CCAGTTTGGT GATTCTNITC TGTGCTGCT GATCTATTGG CGTGAGAAGC TGAAAGTGAC CAGCCAACAG CCATAACTTT
ATGTTTAGTG AGACTCATAA TGGGTCTCCT GCTGGAAGAT CTCCTCTCTA AGANTCAGTA ATTCTAGACC TGCAAAGTTT
GAAGTTGTAA GCATGGGAAA CACAAATTC CCAAATAGGT CCAGATAGTG ATAGAGAATA AGACACTTAC TTGCCTACTT
CCAATTCTCA GCCCAGATAT TCTACCTATA GTGGACATGC CCATGCAATG GGCTATTGGG TTGAGGTAT ACATTGCACG
GTTGAAGGAC AGTGCCCTCAT CCTTGACGGG GTGCCCTTTN CCAGTTGGCA CCACAGCT

SEQ ID NO:1594: (Length of Sequence = 353 Nucleotides)

ATTTTINCGG GGGAGGIGTA TGTAGATGAG AGTCTATGAT ATAAAGCAGT AAAAAAATG CTGTTGTATA GGGATGCAAT
ATTTTCGGTG TAAGGAAGAG GTTTAATTC ATAAATAGA AAACAGGTTG GAGAAGTCTT TAGGAAAGGG ATACCTTTTG
GGTTGGCTTT TGAAGGAGAA GTTATATACC AGGTTCAGC TGAAGGGCTA AGTGAGTAAC TGAAAGGGCT GAGCTATTTG
GATTACCATG AGGAATTTGT GATGGCTGGG AATGTAGGGT GTGTGACCAG ATGTGGAATC ACAGAGGGAG CCCACAGAGG
AGCTTCGGCA CATAANCTAA AGAGTTTAAT TTT

SEQ ID NO:1595: (Length of Sequence = 343 Nucleotides)

CAATATATTA AATCTATTTT GTAGCTGGAC TTCACCTACA ATGTAACAGA ACATTGAATA TTAGATTCTG AGCATATTCA
TGCAAACCTC CACTTTGGTG AAGTGATGA CAGTGGAGTT CTGGAAGACA ATTTTCCTTG TAAACACCAA GTTTTGCACT
TTGGACTATG CTCTCAAGAT AGAAACCTAC GTGAGTGGAA AAAGAAAATG TATAAATGTG AACAAATATT CCTTACCACA
CAGAATAACC CTGGCAACAA ACAATATCCC CAAGTCCTGG GTNATTCAT CCTCACCGTG GGCAGGAAGG GTGAAGGAGG
CTGCACCTGG GNCACAGCCT TTT

SEQ ID NO:1596: (Length of Sequence = 373 Nucleotides)

TAGTCAGTTA TTGCTGCACT AGAGCTAAAT AAAAGACATA AATATCTAAG GCACCTACTG GAATAAACAT CTTATTTCCG
CTAAGAGGTT GGCTAGGGAA GCTCTGCTTC AGAGTATGGG TTGAGTATAA GCCTGTNCCA CATGCTTTT GCTCTGGGAC
CAGGAGTTGT GCAGCCCATC CTTTCTCAA GACAAAAGCT GAGCCAAGCA AGGACATTTA AAGCTTCACT TCTGCTCACA
TCATATCTAT TGGNCAACA TTCCATTGGG CCAAAGCAAA TCACATGGGC CAAGTCAAGC ATCAGTAGGT CTGGGGGAAT
ATTCTTCTCT CTAATCTTGG ACACATGGGA AAGGGTTATG CATACTAATT CTT

SEQ ID NO:1597: (Length of Sequence = 276 Nucleotides)

GATTGTCCAT ACTGATTAT TAGTTCTAA AGAAAGTATT CTTAATTCCA AGCCTAATAG CTCTTATGTC ATTAGTTTCT
AGTGCAGAGA AATGTACTTG ATGAATTTTT GTTGACTTTT TTTTGTCTA GCCAATATGA AGGTGCCCAG TCCCTGCCAA
AATCAGCACT AAACTATTT TNCATGAGTA ATAACAATA TATTCTTTT TAAATAGCAC CTTTAACCCA AAAATCTTAA
GCCTATATAA ACATTCACTC AACANTACAC TCAAAA

SEQ ID NO:1598: (Length of Sequence = 355 Nucleotides)

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AAATACTGAT TTCAGACCTT CTGCTCTAG AAGTCAAAAT ACTTTCCCCC TGACAAGAGG TAAGATAAGG TAGAAAATAG
 AAACACTGGA AGAGAGATCT GGACTCCTAA AGCTGTGATG CCATAGTGTA GTGGGGGGGG GTGCGTGAGG AAGTCAGGAA
 TGCCGCAATG TTAAAGGGAA AGGGAAGATG GAGCAAAGTG AGTCCCAGGG CCAGCAGGGG GCCAGCCTTN TTTGACAGGG
 GCAGGGGAGA AAAGGCCAGA CTTCCCATAC ACATGCTAGA GGGGAGGGCT AGTGTGAAG GGTAAATAAGT TGAAGGAGTC
 CACGGGCT

SEQ ID NO:1586: (Length of Sequence = 256 Nucleotides)

GGACTATCTG TATGGCAGAC TCATCAACTT TGAGAAGAGG AGGAAGGAGT TCGAGGTGAT CGCCAGATC AAGCTGCTGC
 AGTCGGCCTG CAACAACTAC AGCATTGCGC CAGATGAGCA ATTTGGGGCC TGGTTCCGGG CGGTGGAGCG CTCAGCGAGA
 CTNAGAGCTA CAACCTGTG TGCGAGCTGG AGCCCCATC CGAGTCAGCC AGCAACACCC TCAGGACCAA GAAGAACACA
 GCCATTNTCA AGCGCT

SEQ ID NO:1587: (Length of Sequence = 371 Nucleotides)

GGATTCTACA GGCATAGACT TACACGAGTT TCTGATTAA ACATTAAAGA ATAATCCAG GGACAGGATG ATACTTTTGA
 AAATGGAGCA GGAAATTATT GATTTCATTG CTGACAACAA TAATCATTAT AAAAAGTTCC CTCAGATGTC ATCGTATCAG
 AGGATGCTTG TCCATCGAGT GGCAGCTTAT TTTGGATTGG TTCACAATGT GGATCAAACA GGNAAATCTG TTATCATCAA
 CAAGNCCAGC AGCACCAGAA TTTTACCAGC CAGTCTTGTC TNGTCAACAG GGGNTCCAA GGGCTAATAG GAGTNCAGCA
 GCCCACCTCA GAGTCAGACG TGGTTAAATN ACCCCCAAGG GACTCCGGTG C

SEQ ID NO:1588: (Length of Sequence = 314 Nucleotides)

CACACAGGAT TCCATAATAC TCCTGCTGIG TTCTGAATAT TTGTAATTCA CATGGGATTA CTGAACACTA CTACGAGATT
 CTGAATGTTT GINGCTCACA TAGGATTCCA AAATGCCCCT GCTGTGTTCT GTTGTGCCCT CACATAGGAT CACTGCTGCT
 GGGTCTCTAG TGTTCTCTAC TCACATAGAA TTCAGNACA CTGCGAAGAA TTTCTGAATG GTTTCTGTGA ACATAGTATT
 CCAGCACACT CTCGCTGTTG TTTGAATGTT TGTCCTCAC ATAGGATTCC AGAACACTTC TGCTGATGTC TTGA

SEQ ID NO:1589: (Length of Sequence = 256 Nucleotides)

GACGAGGCAC CATGCGTGAN ATCGTGACA TCAGGNGGG CCANINCGGC AACCAGATCG GNGCCAAGTT TTGGGAGGTC
 ATCAGTGATG AGCATGGGAT TGACCCCACT GGCAGTTACC ATGGAGACAG TGATTTGCAG CTNGAGAGAN TCAATGTTTA
 CTACAATGAA GCCACTGGTA ACAAATATGT TCCGCGGGCC ATCCTCGTGG ATCTGGAGCC AGGCACGATG GATTCTGTTA
 GGTCTGACG ATTCCG

SEQ ID NO:1590: (Length of Sequence = 313 Nucleotides)

GGCAACAAGC CAAGTAGCAA AGATATAAGC AACAATCAA TGGAGCCTGA AATATGATAA GAGCATACAT GCACTTTAAC
 AATAATTTTG ATACTGGAAT GATTATTTCA GAAGCAATAT TTTTNCAGAA AAGCAITGGT CTCTGTGACA GAAAATAAAA
 AAAGTGAGCT GCCACTCATA GTGAATTAG AGCTGTGGGC TGAAAGGGTC TCTTTTATAG CCAGTTTGAA ATTTTTCATA
 TAATAAAAAC AGTAGTAAA TATTATATAT ATATACACAC ATACATATAT ATGCATATAT GTACATATTT CTG

SEQ ID NO:1591: (Length of Sequence = 296 Nucleotides)

TTTNACTCTC CGGCCCTACA ATTCAGCGAC TGCGCTCGG CCAAGGCCAG GGGAGACCTG GGTGCCTTCA GCAAAGGTCA
 GATGAGAAG CCATTTGAAG ACCCCTGGTT TGCGGCGGG ACGGGGAGA TGAGCGGAC AGTGTTCACG GATTCCGGCA
 TCCACGTCA TGTCCGCAAG GAGTAGGATT NGGGGCCAG GCCTGGCCTC GGGGTTCCTC CGCTGCCTGC TGGCCAGTGG
 CNGAACCCCC CANINCCCTGC CACTNTCACA CAGTATTTAT TGTTACCAA ATGGCT

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TTGGTCTCA AGTCCTATTT TAAAATTTTG TCAATTAGAG GACTCTTGGT TCTCTTGGT GACTCATTCT CTGCTGATTT
GTTCTCTGTA CTTGCAGCAA ATAAAGTGCA GTCATTGAGA ATGNCCTGT GTCAGTGTGA TGTATCAAGG GATCTTCATG
TTAATATCTG TTTCTCTGAC AACTGTGTTT TATACTTTGT ACTGTAGCTT TCATTGGAGA AGCCCTGGGC TCATAAGAGT
GATTGTGTTT GGCATTTCTT TATGGAACAT AAGCTTTTGA AATATACTTG AGGTAAATAT TCATGGGAGA CATCCAAATG
CAGTAATGAG AGTACAATGA AGACAGCATT TTNGACTTTG GAAACCTGAG TTCAA

SEQ ID NO:1580: (Length of Sequence = 325 Nucleotides)

TCINCTGATG CACCCATGAG AGGGGAGACA GCACTGTCTG CTCTCGCAGT TTTCCCTTAA CACTCCCTTA TCTGCAGACT
TAAACTAGGA GCCCCTGGCA GAGTCCTACC TCCAGAATCA CAAAAGTGTA GAAGGAAAGT GAGAGACATT GATTGACTTT
ATATCTGACT TACTAGTTTC CTAAGGCAGA GATTTTTTAG AAAACTGCCT GGCTGGCCC AGCCAGGAT AGATAGGGAT
GGGTAAAGAG CCTTINAGAA TGTGGCAGTA TGTGGCTTNG ACTTCAGACT TGTGAGATTA GGGGTTTTAT AGGGGTTTTT
TTAGC

SEQ ID NO:1581: (Length of Sequence = 402 Nucleotides)

GCAGATCAAG AAAAAGTTTC AGCCAATGAA CAAGATCGAG AGGAGCATAC TACATGATGT GGTGGAAGTG GCTGGCCTGA
CATCTTCTC CTTTGGGGAA GATGATGACT GTGCTATGT CATGNTCTTC AAAAAGGAGT TTGCACCTC AGATGAAGAG
CTAGACTCTT ACOGTCGTGG AGAGGAATGG GACCCCGAGA AGGCTGAGGA GAAGCGGAAG TTGAAAGGAG CTGGCCCGA
GGCAAGAGGA GGAGGCAGCC CAGCAGGGGC CTGTGGTGGT GAGCCCTGCC AGCGACTACA AGGACAAGTN CAGCCACCTC
ATCGGCAAGG GAGCAGCCAA AGACGGAGNC CACATTCTAC AAGGCCAATA AAGACCTACG GCTTTTTTCC CNTGGCCAAT
AA

SEQ ID NO:1582: (Length of Sequence = 286 Nucleotides)

TCTTAGTTGA TTAACAACAA TAATTGAAT AAAAATTAT GTTTATNCTT ACATGTATGC CATGTAGCAC TTAAGGAGA
TGAGTTTATG AAATTCATGA ATGAGAGGAT GATGTAAGTT TAAAATCAT TATTTTAGTT GCTTTATTCT NCTATTTTAA
ATTCTAAAT AACACAGGTG GCTGTATTT TGAAGAGGC CCTTCTCTCC ATTTGANCIT TATAAACT GAGGCAGTAG
GIGTAAATA TTATCTCCAC TTTATATTTG AAGGAAATGG GGGCCA

SEQ ID NO:1583: (Length of Sequence = 323 Nucleotides)

CTAATTTTTG TATTTTTAGT AGAGATGGGG TTTCACCATG TTGGCCAGAC TGGTCTCAA CTCCTGACCT CAGGTGATCC
GCCTGCCTTG GCCTCCCAA GIGCCAGNT TATAGGCATG AGCCACCAG CCTGGCCTTC CAGTTGTGAC CTGTTAGGA
TACTGCTTTA ATTCATTTTC CCATTGAAAA TAAGCATGAA AATAACTGTG CAGTCATAAT TGTGGTATTT NCTGTNAAGG
AAAGTGGCAG GGCTCTGAGT GTTATCGGG AGACCTAACC CAGTNTCAGA GGGGAAGTCA GAAGGCTTAC TNCCCAATGG
GGG

SEQ ID NO:1584: (Length of Sequence = 301 Nucleotides)

AAATACTTGT AAATCACITT ATGTTTCTGA GTAAGGAAGT AATGAAACAT ACGTACAAGT AATCAGTAAG ACTTGTTAGA
CAGCTGTTGT TCAGGATGCC TTTAAAAGGG CTGTAATGC AGTTACATTC TAACAGAGAA GTCCAACTA CAGGTAAGAA
CTACGGCTTG TACTGTGAAA AATGTGCAGC TTTTCAGTTA TAAACTAGT TGAACACTGG TTTACAAGGT AATCCGTAGG
AACAGAGAGA CTGTAGGAAA ATATTCCAGC ACTTTGAGTT GTGTTTTGGC AGCAGCATTT G

SEQ ID NO:1585: (Length of Sequence = 328 Nucleotides)

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GATAGGAAAC AACAAATGIGT TCAGTCAAGC TGTCAGAAC CAGNCCACGG CTGCACAGCC AGNGTATAC AACAACTGA
GCATCACCGT TTTCCAT

SEQ ID NO:1573: (Length of Sequence = 368 Nucleotides)

CAAATAAGTT AGAAACATGA AAAATTCTTA GAACCTTAGA TGAAAAATTA AATTACTAC TAATACCCAC CTGCAATAAT
TTCCCGTAGT TTGGGATCTA GGTTCACAGT GCATGGCAA AAGACTTTTA CATCTCGAGC CACAAGAACT GGGGTCCITG
AAGACAAAA CACTTCAAAA TTCTTATAT CTCATCAAT TTCAAGAAGT GGCTCAACAT CCTTAGTGTG TGAATATTC
TTTGATATTC TTTCGTAGAT GGTITTTAAT GTCAATTGAT CTGGAATACC TTCAGTCTCT TCCAAATATA ATATGAGNCA
TGAAGTCCGG TATGGCCACT GCTCAGTAAG GTTGATCCCG CTAGCAAG

SEQ ID NO:1574: (Length of Sequence = 397 Nucleotides)

AATTTTAAGC AAATGTTATG TTTAAAGACT GTTTTGATGA AAACCTTTAG AATTGAGTTA GTAGCAGAAT ACATAGCTAA
ATGTACTTTN CTACAAATAG AATGAGATAT TTGATTTAAA ATATTNCTTT CCTCTTGAAA TAGGATGTTA GATAGGGACA
TCTCATTTTA CCTATCAAGT TCTGAGTCTT GCTTTAGAAC TACTTCTTTT AACTTAATTN CATGCATACA CTGGAAGACA
ATAATATGGC TTTTAACTG CATTATCTTT AGTTGAACT GATGGAGAAA CAAAATACT GCTTATACCA TATGGGTAC
ATGCTGAATG TTTTAAAGA CTAGCCAAA CTGACATTTT TTAATAATTAA ATAAGATGTT TTAGTTTCAA ATTAGAG

SEQ ID NO:1575: (Length of Sequence = 296 Nucleotides)

GGACTCAGCC TTCCGCGGCA TCTGCATGAT GATCGGTGTC AACCCGGGGG GCGTTGTGCA GGTGGGGCA GCTGGGCTCT
NAGGCGAGGC GCGGGCNCIG GGCTCGGGCG GCCCCTCACC TGGGATCCGT CACGTTTCAG GACTTTATTT TCTTCTTCAA
TGNTGTAGCC TCCTGGGTGA GCCCGAAGAT NACCTTCGGG ACATGTTTTA TAAGGTGAGG CTCTGTCTGG GCCCTGATCT
AGTTCCGGGA GCAGGCAGGA NGTGAGACCA TCTGGTAACA ATNGGGGCTN GGGATT

SEQ ID NO:1576: (Length of Sequence = 289 Nucleotides)

CTTTATGAAG TAGTAATTCC TGAGAGGTGT GCTGGCTGAA AACATAATAG GTTCTGGAAG AGCCAGGTAA ATGCCTGENT
TTAGACATGC AGGGGTTAAT CAAAATAATT TAGGAGGTTT TTCAGCTGGT GAGCCTCATA TGGGATCTTC GAACCGTGG
CGAGAAGAAA ACCGGTGTIT AGGNAGCACC AGGCACAGTG CTCGGAAGGG AGAGGCTNGC CGGCCAGTGT GCAGCTCAGC
TNTTTCGAGG ACGGAACCCG CAGCCTNGCT GTNTCCACG AGACCCAGG

SEQ ID NO:1577: (Length of Sequence = 320 Nucleotides)

CAGACTCTAC TCAGATTTCC CGCTATGCC CCTAGGACAG AGCTGGAAGG GAAGGAGGCT GGGCCTATTT AGTCATAATG
CCTCCCCACC AGGTCTAGCT TTCATTCAAT CATGAACCT CACCCAAGGG CCAAGAAGTG AGTTCACTGC ACCCTGGACC
CCTGTGAGG TAGGAGAAGT AGACGTTGGG AGCAAGGTTT CTCTCCTAAT TTNTTGCAT CCOCTCAGTG CCCAGCACAG
CTCCGATAC AGGGCAGGTT CACAGTCAGC GTGTCACCT GGGNCTGTGT ATGCACCTAA GGAAAAGNCT CAATTTTCT

SEQ ID NO:1578: (Length of Sequence = 217 Nucleotides)

AATCAGGAGA ACTGTTAGAG CCATACCAGA GAAATCACA AGAAAGGCAG GACTGCAAAG NTCTAGTGA GGTGTGAGA
AAAGGTAAAC CCTTCTTAA GTTCATCTGC CCTTTAGTT ACCACTGGCT GTCTCACTCC TGGATTTATG TGACTCCCTT
AGCTATACTT TCCANCCCC CTGGGATGTT CCCCACTCAT CCTATTCACT CACAAAG

SEQ ID NO:1579: (Length of Sequence = 375 Nucleotides)

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GCACTGTGGC TAATTGTAGC TCAAAGATC TGCAGAGCTC CCAGGGGGGA CAGCAGCCTC GGGTGCAATC CTGGAGCCCC
 CCAGTGAGGG GTATACCTCA NTTACCATGT GCCAAAGCAT TATACAACTA TGAAGGAAAA GAGCCTGGAG ACCTTAAATT
 CAGCAAAGGT GACATCATCA TTTTNCGAAG ACAAGTGGAT GAAAATTGGT ACCATGGGGA AGTCAATGGA ATCCATGGCT
 TTTTTCCTCA CCAACTTTGT GCAGATTATT AAACCGTTAC CTCAGCCCCC ANCTCAGTGC AAAGC

SEQ ID NO:1567: (Length of Sequence = 292 Nucleotides)

GATTTCCCTG GGAAGACAA CATCACCAGC AAATGGATGA TTGTCAACTG GGGAGCCATT GACTCTCCAC TTGATTGTGG
 GTTGAGGTTT TNCCTCAGCC TCACATAACA AGATGCCATT GCTTCCGGTG CTATACACAG CACTCTGAGG CTTCTTTGTG
 CAGCGAGGAG GCTCTTCTAC TATAACGTGA AAATCGTGAG TGGCTGTTC CAAGAAATTG CTGGCTGTGC AGCGATAATT
 TCCTTTGTCC TGGTAGGAGA CATNCTCTAT CTTCAAAGTC TTGCCATAAT TT

SEQ ID NO:1568: (Length of Sequence = 204 Nucleotides)

ACCTACTCAG GAGGCTGAGG CAGGAGAATA GCTTGAACCC AGGAAGCGGA GGTGTCAGTG AGCGGAGGTC ATGCCACTGC
 ACTCCAGCAT GGGCAATAGA GCGNGACTCT NTCCCCCGG AAAAAAAGAA CAAGGGCTAA NTCAAATCA AATTTTCCCT
 GTACCCTAAG AANAATAATT AGGNCGGGAG ATGTTTGACT AAGT

SEQ ID NO:1569: (Length of Sequence = 362 Nucleotides)

CACAAAGCCA AGTACAGAAC CACAGAATGA AGCCGTCACA AATGTTGAAT CCCAAAACAC TAACAGGAAC AACTCGTATT
 TCCATTAATC AAGATTTTAG TATACCAAAT TTTCTAGTTT TTATCTCATG GAAATATAAG GGTATTTTAT CTTTGTATG
 CTACTGAAGG GNAACATCA TCATACAGCA ATGAATACIT CAAGGNCCTT GTTGATCTCT CTATTATTGA CAGTGGGGTG
 TTAAAGTCTC CCACTATTAT TGTGTGGNG GCTACANCNC TTTGTAGGGC TCTAAGAAGG TGTTTTATGA ATCTGGGGGC
 TCCTCTTTGG GNGCATATAT AATTTAGGT AGTTAGTTCT CC

SEQ ID NO:1570: (Length of Sequence = 262 Nucleotides)

TGCTAAATGA TAGANGACAG ATTCAAAGTT GTAGTTACTG CGTAACITTA TTTATGAGGC ATTTTAGAAT AGGCAAACT
 GATCTNTGT GGTAGAAGTA AGAAGTGGG TACCTCTGG AGGAAGAGAA TTNCCTTGA AGTGGCATGA GAGGATTTT
 TTGGCTAATG AAATTATTTT NATATCTGAG TAGGGTTGTG GGTACACAG TTTAGGCATT TTTCAAACT CATGGNACCA
 TTCATCCAAG TCCTGTGCAT TT

SEQ ID NO:1571: (Length of Sequence = 402 Nucleotides)

TGCTAAATGA TAGAAGACAG ATTCAAAGTT GTAGTTACTG CGTAACITTA TTTATGAGGC ATTTTAGAAT AGGCAAACT
 GATCTGTTGT GGTAGAAGTA AGAAGTGGG TACCCNCTGG AGGAAGAGAA TTNCCTTGA AGTGGCATGA GAGGATTTGT
 TTGGCTAATG AAATTATTTT TATATCTGAG TAGGGTTGTG GGTACACAG TTTAGGCATT TGTCAAACT CATGGAACCA
 TTCATCCAAG TCCTGTGCAT TTTACTGTGT GAAAATTATA TCTCGACTTT TTTCAAAAAA GAAAAAATA CTTAATTATA
 ATATAGCATT TATGNATTAA AATAATCCN TTATGTAAAA ATATTTTATT GGNITGGTCA AGATTATGA TTGCAAACCA
 CC

SEQ ID NO:1572: (Length of Sequence = 417 Nucleotides)

CTACCAGCCC GTTTTCACAA CTAGCAGCAA ATCCTGAAGC ATCCTTGCC AACCGCAACA GCATGGTGAG CAGAGGCATG
 ACAGGAAACA TAGGAGGACA GTTTGGCACT GGAATCAATC CTCAGATGCA GCAGAATGIN TTCCAGTATC CAGGAGCAGG
 AATGGTTCCC CAAGGTGAGG CCAACTTTGC TCCATCTCTA AGCCCTGGGA GCTCCATGGT GCGATGCCA ATCCCTCCTC
 CTCAGAGTTC TCTTCTCCAG CAACTCCAC CTGCCTCCGG GGTATCAGTC ACCAGACATG AAGGCCTGGC AGCAAGGAGC

SEQ ID NO:1560: (Length of Sequence = 383 Nucleotides)

CCAAAGGTAC AACAGATTTA CTACATTAA GACAGGAATC TTTTCTAATC TCTGTGCCTA TTAAAGAAGC CACCTGCTTA
GAAGTACTTT GTAGATGAAA AAATACTTAT GAATCCACTG TAACTTCACA ATCTTGAATG CCAAGGAAAA ACTTTACTAG
TTTCATTTAC CACTATTCIT TAAAGINCIT TTTGATTTTA TGTTTTAAAT TTTTAAATTT TATATTTTGA GACAAGTCT
TGCTCTGTTG CCCAGGCTGC GGGGCAGTGG CATAAACGTG GCTCACGTG ACITTTGACCT CCTGGGCTCA AGGAATCCTC
CCATCTTAGN CTCCTGAGCA AACTGGGNCC ACAGGCATGC ACCATCATGN CCAGCTAATT TTT

SEQ ID NO:1561: (Length of Sequence = 313 Nucleotides)

CCCCCTCCAC CGCAGTCGT GCCCCCGTCC CCACCAACCAC CTTCCTCAAC CACTTACAAC TGCCCCAAGT CCCCAACTCC
AAGAGTCTAC GGGACGATTA AGCCTGCGTT CAATCAGAAT TCTGCCGNCA AGGTGTCCCC CGCCACCAGG TCCGACACCG
TGGCCACCAT GATGAGGGAG AAGGGGATGT ACTTCAGGAG AGAGCTGGAC CGCTACTCCT TGGACTCTGA AGANCTCTAC
AGTCGGAATT NCGGCCCGAA GNCAACTTTC GNAACAAGAG AGGGCAGATG NCAGAAAACC CATACTCAGA GGT

SEQ ID NO:1562: (Length of Sequence = 320 Nucleotides)

AAACGGGCG CGAACCGCAG TATCATGCTG GCCAAGAAGA TCATCAITTA GGACGGAGGC ACGCCTCAAG GAATAGGTTC
TCCTAGTGTC TATCACGCAG TTATCGTCAT CTTTTTGAG TTTTTGCTT GGGGACTATT GACAGCACCC ACCTTGGTGG
TATTACATGA AACCTTTCCT AAACATACAG TGTGTACAG TTCTAATACA GCAAATTTAA TACAATTTTT TATTAGATCA
AAATCAATA GAATGTTTCA TATGTTTTAA GGAAGGTTCA TTGAATTTCT TCTTTTCAAT GGAAGTCTTC ATTTGGAAAA

SEQ ID NO:1563: (Length of Sequence = 299 Nucleotides)

GCACAAGCAT GACCTGAACC TGTACCTGC CGINAGTAT TTCACATTC TATAGTTTTT TGTGATTCTG CCTGCATTTA
ATCATCATCA CCAACAAAA TAGTTCCTCT GAAGAATTAT TTATACTAG GATTCTCAGG NTATCTCCTC TCAATCTCTA
TTGGGATCAC TCCACTCTGA CTGTACACT CATTITCCCA CTGATGTAGC TGTCTCAAG TTAGAAGTTA AGTTCTCAGT
CTTCATTTTA TCAGTCATCT CAGCAGCATT CATTATGGTT CAGGCATCC CTCCTATTT

SEQ ID NO:1564: (Length of Sequence = 325 Nucleotides)

CAGATGGNTC AGTTCATACT CTGGCAGTTA ATTTTATTTT CTCTAAATAA AAATGGACAG GTTAATTTAT TAAGCAGCTG
TGTTATCAAT ATGGTACGTG TGTGINCTTG TATAGATAGA TGTATATGTA CATACATAAC TATACATTTT NCTGGACACA
TAATATTINA GGIGCCTATT GTATGCTAGA CACGTCTCTA CCATCAGTAA AAAAGCAGT CCCTGTTTTA CTGTTGATTA
AAAACAAAAT TCTGAAAAA GTGANCAATG AGGCTTACAA CATTGTGTAC AGGNTAAGGN ATCTCAATTT AGGAAAATGT
TGTC

SEQ ID NO:1565: (Length of Sequence = 382 Nucleotides)

TTTTTTTTTA TATTAGTGCC TGCTTTTTAA AAGTTTATTT TACATTTTAA ATACAGTATT TTTCTCATAA AAAAAAATC
CAGGAAGTGC CTAATCCAT GGTTCCTATA CCATATGTAC ATGAAAGCTG ACAGAGAGCC TGACAAATGT TCTGGATGTA
ACAGTATGAA CACCTATGAG CTGGGACTAC TTCTGANICA AAATTAAAAA ACACAAATTA AGCACTGCTT AAGAAAAAA
AAATCCAGTT TCTGAACAAC CAAAAGAGAA CAGAGTTAGA TATGTACAAA ACCAGGTATT AAAAANCAGN AAGGAATACA
GCACACAAAA ACTCAAACAN CCCATATGTA GTGAAGTGT TATACTGCAG TTAATGAAAA CC

SEQ ID NO:1566: (Length of Sequence = 305 Nucleotides)

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CCCTTGTCAC ACAGCCATTT AAAAATCTTC TGAAGGGCCT CAGGGCACAA AGTGATCATT TGGGATCCTA AGTTAAAAAG
GAAATGCAAG AGTAGENTAC TCCAATTCCA GAGTCTTTGC AGGAGGCTAA TCCCACAAGA AGGGTAGCAT CAGAGAAGTG
GGCATTGGTC TTAGTGGTGG ATCATCAGGT AGACAAGTGA TAGTGTGTGT AACCCATCTG AAATTCATTT TACCGTCACC
ACTCTTACAA AGGACAGTTT ATTCCCAAGG ACAGTGCTGA CGGGGAGGGG GACAGGCAGG GAGT

SEQ ID NO:1554: (Length of Sequence = 309 Nucleotides)

TGTTTACTG ACCATGTTTT TGAGAGTAGT GCCCCTAACC ACTTTGTCTC CACTTGCATA GTGTAGTGAT TTTNAGNCT
CTGTATGTCA TATTATAACA GAACTGACTG TATATGGCTA TTTTATCCCA TAATCAAGCC AATTCTTCCA GAATATTACC
ATCAGTATTA CCACATACAT CCTCCCAAT CTTATTTCAA AGAATAAATA TATAGTCACT CATGGTTTTT AAGNAAACCC
AAACTACTC AACCAAAACC TTGAGGAAGG TTTTCCAGG GNTTCTACC TTAATTATTC ATAATGATT

SEQ ID NO:1555: (Length of Sequence = 326 Nucleotides)

GTTTAAAAAC TGTCCAAATG TCATTTTAAT TTATGAAGGC ACCCAGAATA AGTNCATATC TCATCTGCC CCAATATATT
TNCCTGAAGCC AATTCTCTCT TTTATTAAIT TTTACTGAAA ATAGCACTTT TTTCTCCCC CTGATAGTAC TGGGTAATGT
TAGAATGTCC TCTAAAATTC TTGGACCTT ATTTACATTC TCAAGAGNTT TTTTAAATTT TACCAATAAG ATGTGCTATT
TGAGGAATTA GACTTTAGTT CAGTTGTACA TGGNTATGT CTGCTCATAT CATTCATGTC TGAGNCTTTC ATTTTATTAA
TATGGG

SEQ ID NO:1556: (Length of Sequence = 375 Nucleotides)

CCCATCCCTG TTTAGGTGCT TTGTCTCCT TGAGGAGCCT CCAATGCTGC TGCTCCTATA CATGTCACAA TTTAGACCC
AGCATGCTAG GAACTGCTGC CAGCGCCTGG TTAAGCCAAT ACTAAATGGG GCCAAACAGG TGAACAGACA TTCTGTCTTT
CTCCAAACCT CTGAAAAAGA TTCTGCAACT CATCTCACAG TAATTTGTTC CCTAATTTAC TCTTAGGAAA TTGTCTTAA
AGTCTGATTA GGTAAAGTCC AATTCCCTGT AATTAGGATC CTCAGTGAAG AAAAATCTAC CCATCACCAC AATTTATTTT
CTTTCTTATA GCTCCAGCAT CAGTAATTGT ACCAATTATTT TTGGCAGCTC TGGGG

SEQ ID NO:1557: (Length of Sequence = 306 Nucleotides)

AATTCGGAAG ACTATTCCTA TACATTAGAG TGAATTINAG ACTATCTCCA TCATTCTCCA GCCATTCTTC AGTGGGAAAA
AAACGGTGGG ATTAACTAG TGGAAACAAG GCTTTCTCAT CTAGTCCCAA TCCAGTCGAT AAGCTGTGTT TNCCAATCAC
TGCTCCAGCA CAATGGCCCT CAGTTTATTT TTAAGTCTAT GGCATGCCCTG AAGGACCATG TTCCCATGAG TGACACCCTT
CTGTAAATGT GGTGGCAGAT TATGGGCTGC TGTTTTAGAA GGGACTGACA ACTTGCTGGG GGTAT

SEQ ID NO:1558: (Length of Sequence = 292 Nucleotides)

AATTCCTCCT TTCCAAATGT ATTTTCAATC CCTTGAGTGT CTAGGCTTCC TGCTTTTAAG GCCTNCCTTC TAACCCAGGG
TTGCCCCATT CACCTTAAAA CATTTTTCAA TAACCCAGAA AAAACCAGG TGAACATACC CAAGCTCCGG AACCAGCAAA
TNTGTTCGA ACCCCGCTGA TGAATCCAG GGAAGCCAA GAGGACAAAG ACAAGGATGA GGACGAGGAC CCAGGGACCG
NTGGTGAATG GCAACTGCTG TCAACTTCAC TTTTCAACCT CAGNCAGTTT GT

SEQ ID NO:1559: (Length of Sequence = 246 Nucleotides)

GTGTCCTGTT CTCAGCCCAA CAAGAGTGAT CCTTTTAAGG TCCACACAG CTGCCTCTCC TTCTCCGCA TGAGCCTCTG
GCATGGTCTT TCCTCCAGCT GGGCCGGGGG TGGGCAGAGC CTCTCTCTGC CGGGGCCCTT GCCCACCCTT TCCTTTGCTT
GGAGTNAAGG TGTTTCATACC AAAGACGGAA CCATTTCCGC TTTAAAGAAA ATATATNCAG AAGCAGCCGC TGCTCTGNAG
CCTGG

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GGAGGCTGAG GTGGGAGGNT CACTTGAGCC TGGGAGGTTG AGGCTGCAGT GAGCTGTGAC TGCACCACTA TACTACAGCC
 TGGGAGACAG AGTGAGACCC TGTCATAT ATATATATAT ATATGTATGT ATATATATGT ATGTATATAT ATCTCTAATA
 TATTAATATA TATCTAATAA ATGTATCTTA TATATAATAA ATATATCTAA TATATAATAT ATATATTNCC NAGAGAGGGA
 GAGGCTCTTA GGAAATTATC TTCTTGATA TTATGTTATA TTATGCTATA TTGGCTATT TCCTAAGAGC TCTATOGTAT
 TATTTCCATT TATTTGIGAG GA

SEQ ID NO:1548: (Length of Sequence = 334 Nucleotides)

GGAAATAAAG GTGACATGAA CTAACATTC AATCATGAAT GGTAGAAAAA AATGAAAATG TAACGAGATG GGATCOGGGT
 CAAAGTCAGG GGAGGTATAG TTGAAGATAT TGAAGGAGTC ATTATGATAC CAAAGAAAAT GGAAAGAAGT GGTATCCAGA
 TAGGTTATCC TTGGAGAGTA TCNGGGATG TCTCTTTTCC TAAGACCTTA GAGAAGGAAA GGATGGCTGA TAATATAGGG
 AAAAGTTGAC ATGGAAGGAT TAAATAATTT TTTTGAGGAA TTCACGTAAG GNATGATAAT CTGAATTTTC AGGGCTAGGC
 TCAGAAGCAG GAAT

SEQ ID NO:1549: (Length of Sequence = 362 Nucleotides)

AGGATTCTGG GGGCTTAGAG AGGGCAGCCT GGAGAAGCCA GAGTTAAGCT CAGAACAAGA GGTGCAGGAA GAGCCACAGC
 AGGGAAGGGA AGAGAGATCC CAGAGGAGGG GCAGAGTNTG GCAGGACAAG GGCCCTGCCG TACATGCTAT GCATGAAGGA
 AAATCTTGAG ACTAAGACTC ATGAAAAGNT CAAAATAAT TATTTGCTGT GGGCCCTAGA AGACTNAAGA GACATTINCT
 TCGCCATTG CCCAGGGCTG CCTGGGCAGG AGACAAAGGA ATNAAAAGTC CAGGGGGAAA GCAAAAATCT ATGGGCTTCT
 GAACACATGC TTCCCGGAGC TCGTCINCAC AGCATCTTCA CC

SEQ ID NO:1550: (Length of Sequence = 328 Nucleotides)

GGACTAATTA ACTAAGAGG TTTGTACAG CAAAAGAAAC TGTCACAGA GTAAACAGAC CTACAGAATG GGAGAAAATA
 TTCACAACT ATGCACCCAA CAAAGCTCTA ATATCCAGAA TCTATAAGAA ACTTAAACCA TTGAACAACC AAAAAACAA
 CAACCCATT AAAAGTGGAC AAAAGTCATG AACTGACACT TCTCAAAAAA AAGACATACA AGCAGCCAAC AAGCATATAA
 AAAATGCTTG ATATCATTA TATCAGATG AATGCAAATC AAAACCACCC AAGTCTTTT CTCTGTCTA GGNIAATTIA
 TTTTAGGG

SEQ ID NO:1551: (Length of Sequence = 365 Nucleotides)

CAGGAATTTA CATGGGGAGA OCTACCTATG GCAGCTCTCG CGTCGGGAT TACTATGACA GAGGATATGA TCGGGCTAT
 GATGATCGGG ACTACTATAG CAGATCATAC AGAGGAGGAG GTGGAGGAGG AGGAGGATGG AGAGCTGCCC AAGACAGGGA
 TCAGATTTAT AGAAGGCGGT CACCTTCTCC TTAATATAGT CGTGGAGGAT ACAGATCAG TTCCAGATCT CGATCATACT
 CACCTCGTGG CTATTAAAGC ATGAAGACTT TCTGAAACCT GCCCTAGAGC TGGGATATTG TTTGTGGGGC AATATTTTIN
 ATTGTCTCTT GTTTAAAAAG TGAACAGTGC CTAGTGAAGT TAGGT

SEQ ID NO:1552: (Length of Sequence = 330 Nucleotides)

GATCCAAAAA AATTTACTGA AATAGCAAAA ACGTGGACTT TGGGATTTCC TCTAACTGCT GCAAATTATA ACACAGAATT
 GCTCAGTGT AATACTTGAN TTGTGGGGCC AAGTCTTCTG GCTGCCCTAG TTCTTTTTTC TGGCAATTTGA AAGCCCTTGA
 GCTAGCTATG GAGCTAATCT TTGGACAGGC TTTTGGTTC CCAGGAATGT CATGCCTTTG AATTTCCAAT CTATATATAT
 ACAGTGTGTG TGTATGTATA NCTGTCTTTT CACTGTAAGG CACCTNCACC CATCCCTTAT AGAAGGNGGC CACAAACAAT
 CAAGCAAATG

SEQ ID NO:1553: (Length of Sequence = 304 Nucleotides)

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GTGATGTTAT ATCAGGTAAA ACCTGTCIAA GGAGAATAGA CAGTAGTTAG TTCAACTTAC TCATTACGTA TTAGGAAGAT
 TAACCTGGTT ATCATTGTTT TATACATATA TATATGNAAT ATATATGAGT ATTGCTATAA ATATAATACT TTTACCTTGT
 TTATGTATTT ACTCAATATT CTCCTTTTCC TCTAAAATAA TCTGAAGTGA CTATTATCAA TAAGTTTACT ATGCCAAAAT
 TCATTAAATTG CCTTTCACCT AACCTTTGGG GCCATAATAA ATAATAAAAT GTATTGCCAT AACATTAATA AACTACCTTA
 CAAAACCACC AATTAAAATC AAACAACCAA AAAGGTGTTA TTTACATCTG NNCACATAAA TCTACTAAAA ATACAGGGTT
 CAT

SEQ ID NO:1542: (Length of Sequence = 333 Nucleotides)

CTGGTACATG ANTTTATAAA AACATGTCAC GCCCGGCTCT GTGGCTCATG CCTGTAATCC CAGCACTTTG GAAGGCCGAG
 GCGGGCGGNT CACAAGGTCA GGAGATCGAG ACCATCCTGG CTAAACGGT GAAACCCGTC TCTACTAAAA ATACAAAAAA
 TTAGCCGGGC GTGGTGGTGG GCGCCTGTAG TOCCAGCTAC TCTGGAAGCT GAGGCAGGAG AATGGCATGA ACCNGAAGG
 CGGAGTTTTT AGTGAGCAGA GATCATGCCA CTGCACTNCA GCCTGGGTGA CAGAGCAGAG CGGGGACTCC GGAGCAATGG
 GNAGTACAAT CCT

SEQ ID NO:1543: (Length of Sequence = 329 Nucleotides)

CCCCTGATAA ACCTATCAGA TTCTGTGAGA CTTATTTCATT GTCAATAGA ATAGCAGGGG AAAGACTGGC CCCCATGATT
 CAATTACCTC CCCCTGCATC CTTCACCAA CATGTGGGAA TTGTGGGAGA TACAATTCAA GTTGAAATTT GGGAGGCGGC
 ACAGCTGAAC CATATCAGTC TGTATTATCT CTCCTTTTTT CTGCTTTAAG NGAATATACG NAGGTGTTGT TTCAGGGNT
 TATACATAGG TATTCTGAAA GATGGGGTTA TTTTCTGTTT CANACTTTGA CTAAGTGGCT TCTTTTGTCC CCTATGTGCC
 AGAATAGCC

SEQ ID NO:1544: (Length of Sequence = 313 Nucleotides)

CGGAGATCCG TGATGTAACA AGGATTGANC GAATCGGTGC CCACTCCCAC ATCCGGGGAC TGGGGCTGGA CGATGCCTTG
 GAGCCTCGGC AGGCTTCGCA AGGCATGGTG GGTCACTGCG CGGCACGGCG GGCGGCTGGC GTGGTGCTGG AGATGATCCG
 GGAAGGGGAG ATTGCCGGTC GGGCAGTCCT TATTGTGGC CAGCCGGGCA CGGGGAAGAC GGCCATCGCC ATGGGCATGG
 CGCAGGCCCT NGGCCCTGAC ACGCCATTCA CAGCCATCGC CGGCAGTAA ATCTTCTCCC TGGAGATGAG CAA

SEQ ID NO:1545: (Length of Sequence = 384 Nucleotides)

CCCAAACCT GGAGCTAAGA ACTTCATCTC ACTTTTGACA CCCAGCCCC CAAAATATGG AAGCCCAGGA GAGCCAGGAG
 AATTTATAGC AGAGGCTTAA AGAGAAAGTT ATGATTGTG TAAAGTAGAG AATAAGGTGA AAAATAAAAC CTGGTACTCT
 GTCTGGAAGT CCTGGAAGTC TCCTTGCCCA ACCTCAACTG GCCTGTGGGC TCCTGTNTCC TTGCTCTGGG ATGCCATGGT
 GAATGTGAAA ACAGGGGAGG TTGTGTGTGG GGGTGGGAAT GGCCINTCGG TTGCAAGGCG AGTCCTTTGC TGAGCCCAGC
 CTGAGACCCA GCTTATGGGC TTTATCCAGG TGAGAAAATN CTGGGGACAT GTGTTGAGG TTTA

SEQ ID NO:1546: (Length of Sequence = 345 Nucleotides)

TTTAAAGAAC AATGATTAAAG TGAAAATNCT CTCAGTTTTT TTTAATTGGT TCAGCAATTG ATTAATTACT GAATCTTGAC
 CCTAACTTT TTAGTCTAGA AATGTGCTTG AGGAATACAG GCTGGAGATC AGCTTTTGA CATGTCATTC CCTCCTGGN
 TCACATCCAT GTTGAATCA ATTTATAAAC TGCCCTCCTA AGGCTTAAAA TGATGGTGAT CTACAGACAA GTGCCCTCCT
 AGGCACAGG TTGCTGGAGA CTGATGCCAG GCCCATGGCT CTAAAGGGA ACACTGAACT CATGGCAGAA ATGGTGGAAA
 GTAGAGAAAT GAATAGAGGG GGGAA

SEQ ID NO:1547: (Length of Sequence = 342 Nucleotides)

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AATTGGGAGT CCTGTACTGT CTTAGGGTA TGCAAAGAGG CTCCTCTTT TCTAGGTGTT CATCAGTACA ATATGAC

SEQ ID NO:1535: (Length of Sequence = 323 Nucleotides)

ATATTACATT GATGTCAGTC TTAAAGATG GAGTAGGACT TINCAGGCAG CAACGAAAGG GAAGGACATT TCAGAAGCAG
AAATACCAAT TGTTAAGGGA TGACAGCCAA GAAATATTAA AGCATATTTG GAAAGTATTG AAAATCTCTG TGTGGCTAGA
ACTTTAGATG AAGAATCAGA TACATCTGGA GAAGGAGATT NAACCNGATG ATCATAAAGA ACATTTTATT TAGGCCATGG
TAAGGCTTGG GCACINTGGA GCCCATGAAG GTTTTGGAC AAGGGAGTTT CCTTAGGGAG GAGTAINAAG CCATAAACCA
AAT

SEQ ID NO:1536: (Length of Sequence = 305 Nucleotides)

AACCACATTT TTAGTCATC TNCCTCACGC TGGATTCCAA CATGCTGGCC CGGAGCGTGG CTGGCTGGAA GCAACTCCAA
CAGGTTTTTC CCTTCCCGT CATGTACATT ATTTATTTTT GATCCTACTC ACTGTCCCAA GTCCAGAGGC AGTTACAAA
AACACTCTTG ATGCAAACCG TGAGTGGCTA CAACACACGG ATGGGGTGG GCGCGATTCC CACAACAGGG AGTGAATCC
GGGGAAGATG ATATATAGGG GCAAGACGGC CCCTTACTTT GCTAAGAGTA TATGGGAGCT CAAA

SEQ ID NO:1537: (Length of Sequence = 279 Nucleotides)

GGTGGCAGCG GCGGCGCGGC GACTGAAGCG CGCGAAAAGC TGAGGCGGCA ACGTCGGGA CGGCTGCNCG GGACGGCTCT
GTAGGAAGGA ACTTGGTTCC CCTTCCCTCA GCTTCGCCCC CAAAAGATTG AGAATGGACA GTTTAGAAGA ACCTCAGAAA
AAAGTCTTTA AGGCTCGAAA AACGATGAGA GTNAGINATC GTCAGCAACT TGAAGCAGTG TACAAGGTCA AAGAAGAACT
NTTGAAAAC TGAATGCAAG CTGTTAAATN GCAACCATG

SEQ ID NO:1538: (Length of Sequence = 310 Nucleotides)

ATATTTCTT CTGCTCTGAC TCGGAAGAA CTGCACTGT TGCCTAGGCT GATAATCCCC GAAAAAAGT AACAAATGCA
ATINTACCCC CCACCCCAT ATACAGCCCT CATATATATA TATGAGAGAG AGAGAGGAAA AGATCATGAG ACATGCTTTC
TAGGGAAAAA AAATCTAAC TTCCCTAGCC ACTGTAGTCA TTTGAAACCT GAGTTAGACT ATGAGTTAGG AAGTATTTTC
ATAGAGTCA ATTAATATAT TTCTGCTCTA TGCATGGATG CTAACAGGTT TAAGGAAACA CAAAAGCCAA

SEQ ID NO:1539: (Length of Sequence = 267 Nucleotides)

GAGATTTTAC TTTGTAATCG AGTAATTTAG CCACACTCTT GTGAGGGAAC AAGCCAGAGC CAGGACCGCA TATTACCGG
TAAAGCTGCA GAGAAGACTT GAGACTTGTA AGATTGGNCC NGGCTGCAGT CCGTGGTCA GTAACATCTG CAACATTATA
CAGCCAGCAG ATCAGCTCTT CCAGCTGACA GCAAAATGTC TTCACACATT GCACCAGTGA TTCTTTTCCC TGINCTCTC
CTTCTCTGGG GAAGCTGCCC TTNAACA

SEQ ID NO:1540: (Length of Sequence = 354 Nucleotides)

ATTTATTTCAG ATGAAAAAAA ATCAAGGCTT AATTTAAGTA ACTTGTCCTAA GGTCAAGGAG TTGACAAGTG GCTGAGCTGG
AGTTCAGCAT CTCAGACATC TTCTTTGAA TCCTTGCCCTT CCTTGTTGAAT TTCAGATGAC GGAGCATGAC GGCTGCATGA
TTATGGGGTC ACCGGGCTG TCCTGGGCCT GAGGGACCAA GGATCAGAAA GGGCAAGAAC CAACTCGNTC AGCTAGTGAA
AGTGCAATTG GACANTGATC CTGTTCCGG GNTTAACCTT CCGCTTGGCC TTTAAGAGGG NTCTTTGAAA TGCACCAAGG
GGCCTAGAG GAAGCAAGCA AACTNCTTGG ACCT

SEQ ID NO:1541: (Length of Sequence = 403 Nucleotides)

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ATCTAGACTC CCTTGTGCCC TCACTATGCC AGCGGAAC TG TAGATCATAG CCAAAGAATT TGTGAAGTTT GGGCTTGCAA
CTTGGATGAA GAGATGAAGA AAATTTCGTCA AGTTATCCGA AAATATAATT ACGTTGCTAT GGACACCGAG TTTCAGGTG
TGGTTGCAAG ACCCAITGGA GAATTCAGGA GCAATNCTGA CTATCAATAC CAACTATTTT GGTGTAATGT AGACTTGTTA
AAGAT

SEQ ID NO:1529: (Length of Sequence = 241 Nucleotides)

GAAGGAGAAA CACTTCTTGC CTCCATAATT CAGACAGTAA ACTGATCGCT GAGATTGAAG TTTGCTTGTT TCCTGGGGAA
GCTTNAAGAT CCTCGTGGGA CCACCATCCC CTGCTCAGTC CTCCCTGGAA GGGGGCACTG GCTGGGTATG AGCCGCGTCA
CCGTTGGGTT TGTAACTTIN TGGATGGTGC CTGENTTCA CCTGGGGCTG GCTGAGGAAA GGGGAGGCGG TAGGNGTCTG
C

SEQ ID NO:1530: (Length of Sequence = 356 Nucleotides)

GGTCTCATGC AAGGGTTTCC CATGCCGTGA AGTGTGTTTG TAATCCACA TGTATCAGGT GCCTGGCTGC TCTGGGACTT
GCAGTAATTG TCTCTTGTTT GTTTCAGGTG TGATCCCTG GGCCTGTTG TTGTGGGGG AGAAGACTTA GACCCTTTTG
GGTGAGTACT GCTGGGGAGG TGSCAGCAAC ACAACTTGCT TTNTGGCTT TINAGCCCCA GCTCATCTTC TAATTINAGA
GTTTTCGGTC AGTCTCTTCC TTTGGGNTIN GAGGAGGCAG TTGTTTGCTG AGCAGCTGAG AAAGCACTGC CACATACGCT
GGCCCTCCA CACCTAGAGC GGTGCAGGAG AGCACT

SEQ ID NO:1531: (Length of Sequence = 379 Nucleotides)

CCAACAGATG CTGCTACGTT TCCTTCAAAA TTGTTAAACA TCTCTTGGG AAGAAGCTGC TTAGTTATAT CCAGCGATTG
GTTCAAATCC ACGTTGATAC AATGAAGGGT GGGGTATCTA GCAGGATGTC TAGTTCACGC ACTGGGTGAA AAACAACCGA
AGCTGCAGAT AAGTGAACGA GATGTTCTCT GTGTTTCAAT TGCTGGACTT TGTATGATC TCGGTGATGG GCCATTTTCT
CACATGTTTG ATGGACGATT TTATTCCTCT TGCTGCCCCG GAGGTGAAAT GGACGCATGA ACAAGGCTCA GTTATGATGT
TTGAGCACCT TATTTAATTC TAATGGGATT AAGCCTGTCA TGAACAATA TGGGTCTCA

SEQ ID NO:1532: (Length of Sequence = 307 Nucleotides)

GATAAACTTG AGCCACCAAG AAGTGGACTC TGCCTAGGAA GACAGTTTGC TGAAGTTAGA AAGTACTGGT CTAGGAACCA
GAAAACCTGA TTCTNCCAA GAGTTAGAAT TGINAGINAG TTCTTNTGG TTTTINAGTTT CCTTATCTGT AAAATAATTA
CCGAGTTCAA TTGGATAATC TCTATGATCC CTTCCACATT CTGCATACCT GGATATCTAC TGTTTCTAAA TATTTTGGCA
TTTCTTATAA AGCCCTTCA CATPINCTT ATTATTTTTC CTCACAAGA ATTCTTGAA TAGGATA

SEQ ID NO:1533: (Length of Sequence = 337 Nucleotides)

ATGGCTTTAT TTGCTGATTG AGAAGTGGTC CAGCCGTGGG CTAGCAGTCA TTTACATATC AGTGACCAAA TGCAAACATA
CCCGTACTAA CAGTGCTTTG GTCCATGACA TACCTTTTGG ACAGCCCAAA GCTGAAACGT CAACTCTATC TGGGGTTACT
TGCTTATACA AAGATGTTAC TCTAGCAATT GTTGCTTGAG GGCAAGACCN GATGATTGTC ACTAGTAGGA AGAAAGCAGA
AGTGATGCAG CTTACACTGC ATAGTCCCTA CCCTTNTGGA TTAAATGGAA AAGTTGCTCA AACATAAACT TGTCTTAAAC
AAAGGTGGGT AAGANTC

SEQ ID NO:1534: (Length of Sequence = 317 Nucleotides)

ATGGGCATGT GGGTACTACG TTTAAATATT TAATTATTTT AAAAATAAAA TAGGAAAGAT AAAATAGCTT AAAGTGTATT
GATGCTCTGA ATAACTTTAT GAGTGAATAG ATACTGAAAT TTGAAGTCAG TGTTTTGCAC AACAAATCAA GATTTGGGAC
TGGACTTACT GGGTTGGGGA CTTCTTAGGG ATAACGGTGG TGCTATGAGC ATGCTGGAAA GATGAGAAGC AAAAGCCTGG

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SEQ ID NO:1522: (Length of Sequence = 405 Nucleotides)

GTGAATTCA AGCAATGTT AATGGGGACC AACAGGGCTG CATTAGAAA ACCACTTTNN ACTGATCTCT CCCCCACATA
 TTTTAAATTT GTCTTGCTTT GTTATTTTG GTTATGCAAG TCCTTTCTCT TCATGAAACA AGTGTAAGGC TCTAAGGCTA
 AAATAATAGT TATTTTGTG GSCCCCAAT AGCTACTTTT GAATTTCTTT CTTAGTATA TCTCAAATCT GGGGAACATG
 GAACTTGAAG ACTCCTAACC ATGAAGCATT TGGAAAAATA CATATCATT ACITTTTACA GAACCATTTT CTTAAAAATA
 AGGGGGCAAT ATCCAGATT ACATGCATGT TCATAAATA AGCTTTGGTT TTAAAACAAA TCCACACCAG CAATTATTTT
 CAGCT

SEQ ID NO:1523: (Length of Sequence = 284 Nucleotides)

AGNTACAGA ACTCCAATTC TTTATTATC ACAGCTTGCT CACAATGACA TACAGGAAA TAGCACTAAT GAAGNGTAA
 TATGCAGGCA GCAACCTTCA GGAGTTGGGA GTTGGGGAGA AACGNTTCA AAACITGCGAT AGGTACTTAT GGTGGGTATC
 TGGTGATTCT NAGTTGGCAC AAATGCCCTG CCTAGCCCCC TTAAGTGGT CACTTTCACA GATGNGTGT TTTGTGTG
 GTGTGTGTTAG TAGGCAGGAT TGCCTTACAC TGGGAAGAA AGAC

SEQ ID NO:1524: (Length of Sequence = 299 Nucleotides)

GTGCTTGTTAC GTGACAGTTT TGCTGATCA CATTITAGGA AGATGATGCT GTTCTTNCIT CTTAAGTATT TATTTNATC
 AGTCAAGTGA TAGGAAGTTC AATTTCAAGT ACAAGACATT TGGATCAAGA AGTGACTATT ATTTATTAT TTNAGATGGA
 GTCTTGCTCT GTTGCCCAAG CTGGAGTGCA GTGGTGTGAT CTCAGCTCAC TGCAACTTCC TCCTCCTGGG TTCAAGCAAT
 TCCNCTGCT CAGACTCCCG AGTAGCTGGA ATTTACAGGC ACCCACGGG ACCAGTGAA

SEQ ID NO:1525: (Length of Sequence = 398 Nucleotides)

GCCCATGAAG CAGCTCTCGT GGATTGGAGT CTCATGCCCTG CAGCTCTCCC ATACTGGAGT TGCATGCTGG TGGTCTTACA
 GTGCTGGTGT CTGGSCAGTG GCTCACTCC CATGCTCCA GGAGGCATG CCCTGGTGG AGATCTCTGT GGTGCTCTG
 TCCCTGTTAC AAGTTCTGC CTGGGCTTCC AGGCTGTCCA TGATATCCTT TGAAATCTAA TTGGAGGCTG GCATGACCCC
 ATGGCTTCCA CACTCTGTGC ACCTGCAGAA TCAGACCAT GTGGACACTG CCAAGACCTA CCTACCATT GTGCTCTCTG
 GAGCAGCAGC ACAAGCTACA TCTGGGGCTG CTGAGCCAT GGCTGGGGCT NCCAAGGAGC AGAGTCTGA GGGTGGCC

SEQ ID NO:1526: (Length of Sequence = 318 Nucleotides)

GTCTCTCTCT ACTGCACCAT GATGCCTTTA AAAAGAATCT AGGGGCTGGG CACAGTGGCT CAGCCTNTA ACCCAGCACT
 TTGGGAGGAG TTCATTTGAG CTCAGGAGCT CGAGACCAGC CTAGGCAACA TAGTGAGACC CCGTNTCCA CTAAAAATGA
 AAGCAAATTA GCTGGGTATG GTGGTCCATG TCTGTACTGT GGTCTAAGCT ACTCGGAAG TTGAAGCAGG AGGNTCACTT
 GAGCCAGAA GGTCAAGGCT GTAGTGAGCC ATGATTNIGC CACTGCATT CAGCCTGGG AACACAGTNA GACCTGT

SEQ ID NO:1527: (Length of Sequence = 313 Nucleotides)

TTGGCTAGAA GGGAGGCTGG AGCCTTTCAT GGTGGCTTTT GAATGCCATG GTGAATAGTT TGTCTTTTAT TTGTNATGA
 ATAGCAATTT GTACACTTCT GAGCTATTAG AGTGAAATGA TTAAGCCTGT GGTITAGGAA GAAAGAGCCT ATTAGGGAGA
 TAAATCTTTC CCTAGTTGTA GGAAGGGTGT GAACAGTATG ATATGGAGAG GGTAGTAATG AATGANGGAA TNGAAAACGA
 GAATAATTT AATGATACTG GAGGTGCAGT ATACAAGTTG NGCAGTAGGT TTATGTCTAG GAAGATAAGA AGT

SEQ ID NO:1528: (Length of Sequence = 405 Nucleotides)

GCGTGCCTA CCGCCACCGC CACCGCCACC GCGCCGAGT GCTGTCTCTA TGGGAGGAG GAGGAGGAGG AGCGGAGTC
 AGCGACACAA GTACATAAAT AAAGGATAAA ATATTTTATG AAACAAATCT TCAATCAAGT ATAACATTTT GATGCTTGGC

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TTTTGCCTTA TTCTATCCGA TTTTTCCTT AAGCTTCTAC CTGGNATTIN CCTTTGGAAA AGTCTCTGAG GTTCCACCAA
 AATATGGAAC TINATTTTGG ACACTTTGAC GAAAGAGATA AGACATCCAG GAACATGCGA GGCTCCCGGA TGAATGGNIT
 GCCTAGCCCC ACTCACAGCG CCCACTGTAG CTTCTACCGA ACCAGAACCT TGCAGGCACT GAGGTAATGA GAAGAAAGCC
 AAGAAGGTAC GTTCTTACCG CAATGGGGAC CGCTACTTCA AGGGGATTGT GTACGCTGTG TCCTCTGACC GTTTTCGCGA
 CTTTNACGCC TTGCTGGCTG ANCTGACGNG ATCTCTNTCT GACAACATCA ACCTGCCTCA

SEQ ID NO:1517: (Length of Sequence = 411 Nucleotides)

TGAGCAAAC ACAGAGGACT GCACCTCTAG TGGCTCGTAA TGAGAAAGAA GATGGTCTCA AACCTGAGAA AGATAATGTG
 GAGTGGACCT CTGTTGTCTC AGTATTAACA GTCCCTTCTA GGAAGTAGGT AGCATTCTTG AAAATAGAGT GAAGCAATTG
 ACTGATGGAT TTAATCTTFA AACTGCTTAG GTAACCATCA ATCTGTAATG AGCTTAATAC TCTTAACTAG GTGCTATTTT
 NCATGTGTGC TACTTTGCCA GTGATAAAGG ATTACGAAAA ATTCTTTACC AGAGGAAAAA AAAAAATTGA ATGACCTTTC
 TTGGGAAGGT GGTCCCTTGT TTGTGATCAA ACTTTGACAA GAACTGGTAA TTAATTTCTT CTAAGGAATT NACCGTTCTC
 ATAGTGTGTT T

SEQ ID NO:1518: (Length of Sequence = 388 Nucleotides)

GGTGGGCAGC TTCTCTCTGC AGCTGCTCTC CCATCATCTG GCTGAATATG GGGCTTINAT GGGCTCAGG GGAGGAAGTG
 TGTCNAAAT GGTCCGTGGG CAAACATGGG CGGGCCTGGA AAAGGCACCA CAAGTTCCTA CCCCAGTCAG TAGGATCAGC
 AGTCTGACAC CCAGGCTTCA GGCCTCCTCC GACTTGAAGG TGGTGTCTCA CCAAGGACTC ACCCACTCTT GCCCAGGAGC
 TTGTNTGCTT CCTGCTGCCA TTTATGGTGC CCAGGCTGTT TGTNCCAAGG AGTGTCTGTG GGCCAGCCTT GAGCTGCCCT
 CAGCACCCCC TTGGCCTCTT TTCTGINTCT ATTGGTGCCC AAAGTCCGCA GCAGGCTGAA GTGGCAGG

SEQ ID NO:1519: (Length of Sequence = 358 Nucleotides)

TTGGTTAAGA CCAAAGTCAG ATCACTCCCT CCTAGCTCCA AACCTGCACT GGCTCCCAAT TCINTCAGCA TACAAACCCA
 GATCCTCAGG CTGCCATTIN TGGGCTGAAT CCTGTCCCTG CTGTCTGATC CCACCAGACA TAATGGAGGC CTGAGGTTCC
 CTGAACACTC CTAGTTTAGC CTTAAGTTAA GTATTTCAC ATGCTGGTTC CTATGCCTGA GATAATGTTT CACATTINAT
 CCCATTGCTT GCCAGAAATA GAAACCTTTC CACATAATTN CAAAACAGAG TTTACANCAC AGAGCTTTGG GTGACTGCAG
 GCCTCCAAGA ANGGNAGGCA GAAGGGGCAC TGAAGAGT

SEQ ID NO:1520: (Length of Sequence = 379 Nucleotides)

CCAGAGTTAA ATATGCCCAG GCTGAAAGAA GGTGTATAAT GTATGGNCGT NCTTATACCA AATGATTTCT TTGGAATTFA
 AACAAATATG TTTAGTATTT TATTCCTAAT TTAGGAAGAA AAAGCAACTA AAGTTGTNCT GACATTGTAC ACAGATGAGT
 AGCACGTAAC TTTTATTTAG TAAGCCCCAT AGGATAGTAN GGNATAAAAG TTGTTAGTGA GCAAACAGG AGTATCCTGC
 CATTTCCTTT AATTCINCTT GTGATAGTTT TGAGGGTACA ATAATTCCTG TGTGCGTGTG ACTCAAGCAA ACCAGAAAGT
 GTCTTTTGTA AATACGCATT TTGGGCCTCA TCCTCATGGA GGTTCCTGTT GTTTGTGG

SEQ ID NO:1521: (Length of Sequence = 339 Nucleotides)

GGGACAGGAA GCCTCTTGGG TTGGACTCAG ACTCAGGAGG TGACTCAAGC CTCAAGCTCA GAAGCCCTCT GTNACCATCT
 GTTGACTCAG AAGCATGCCC ACCATCCCAT GCAGTGCCTT TCCAGGCACT GTCCTGTAGC AGACGGAGTT CAGGCTTTGG
 AAGTAGACAG ACCTGGGTTT AAATCACAGC TCCGCTTCTT CCGCTGAAG CTCCATAACC TAGGATAAAG TCGTAAGCC
 TNCCTAAGTC TCAGATTTCT TACCTCTAAG GTGAANGGAT TGGATTCCAC TTTACTTCCC CCTTTTCCC TTTANGGACT
 CTGCATCCTC NTTTGCTTG

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SEQ ID NO:1510: (Length of Sequence = 247 Nucleotides)

TAGGAAAGAG TAAGANCTTC TTNCAGGCT GGAGGTGCTC GTATGGTGGG ACAGGAAAGG GGAAAAGAGA AAGGGGCAAC
 ATGGCAGACA TACCACGGTT CCTACAGAGA TTAGGGGCAG CCTGGCCCG GGAAGTACAC AGGGCAGAGA GCTGACTCTC
 AGGCCAGGAA GGAGTTAGC TCTNACCCAT CCTCANGGAC CACGGCTCTC CCCCAGCCTC AGCTGACACA CACACAAAGG
 AGCGTTT

SEQ ID NO:1511: (Length of Sequence = 369 Nucleotides)

CCACTTGCTC CTTTATTAAC TGINCTTCCT GTAGTGTGTA TTGGGATCC ACTGGGAATC ATAGAAAGGA ATCAGTGCTA
 GGNCTGTGTG GGATTCACCC CTGAGGGATG TGGCTTTGGC TTCTCTATCA ACCTTTCTGT TCCCTTGTGC TATAGGAGTT
 AAGTCCCTTT NATGCCCCCT ACAGTGGATT ATAGCTATGG CCTGTGGCAG GTGTATTGTT TACAATAGCT GAAGAATTTT
 AGGCCCATGC TTTATGGGGG AGGGTTTINC TAGCTAGTAG TCCCCTTTCT TTCTAGATTG CAGCATAAGC GTGAACCNCC
 AAGGAATGCC ATATTTTAGA ATCCTGTNAT AGGATGGTTA AGGCTTTTT

SEQ ID NO:1512: (Length of Sequence = 236 Nucleotides)

ATGCATTAAG AAAAGACAGC CAAATGACAG ACTGATAAAA TATTTTCATT ACAAAATTGG TTGAGAACTA CCGTGTGACG
 TAAATGAAGT TTCTATTACA CATGTACTAA CAGAGACTTT TCATTACATA TTCTAGGATA TATTTAAAT ATATGTATAT
 TTGATATTA AGGGAATATA TTTGTGTGTC ATTTTACAAT GTGTAACTAC ATATATATTA NGGCCTTTCC AATAAA

SEQ ID NO:1513: (Length of Sequence = 408 Nucleotides)

CATTAATATT CTCAGTGTG GAAATATTTT NATATTGCCA AGACCATAAT GTGAGGNGTG CAGCTGCATA ANTCCCTGAG
 AGAAGATTAG TGGGGCTAGC ACCTTACAAG GAAAGACAAG CTGTGTGGCT GGGCCCAAGG ACAGTCAAAT GTCTGCCTGA
 CAATCTCCAC ACAGAAGGGT TGCTCAGATC ACTTAGGACA CCCAGAAAGA GCTCACAAG GCCAAACAAC CTAAGGCTGN
 TATCTCCAT CTAGCGGTAC TTACCTGGGA ACTGAGTGGC AGTGGACAGG AAGCAGGGCC TGGGCTAGGG AGACCCCTCAG
 GAGGAANGGG GACCCAAGAA GTTAGAAGTC CATTCAITCA TATACTCAIT CATTAGCAA ACATGCGCTT GACACCTTCT
 GTTATGCT

SEQ ID NO:1514: (Length of Sequence = 359 Nucleotides)

TTNCCAGGC TGGTCTCAA CTCTGGGCT CAAGTATCC GTCCACCTTG GCTTCCCAA GTNCTAGGAT TACAGGCATG
 AGCCACTGIN CCTGGCTAGA AAATNINITT TAAAAGTNA GGATGTAGAA TTNCCTAGCT ATGTAGGCAA GGCAGGAGGA
 GAGGGGCCCA GTTGGGAAGC ATAGCCCACA AGAGTATGAG GGCCTGANCC AGGATGGTGG CAACAGGGAT GGAGAGGAAG
 GCGTGCCAGG GCATGGTGGC TCACACCTTA TAATCCTAGC ACTTTGAGAG GCTGAGGGAG GAGGATCAIT TTNAGCCAA
 AAGTTAGAGA CCAGCCTGGG GNAACATAGT TAAGGACAC

SEQ ID NO:1515: (Length of Sequence = 343 Nucleotides)

GAGCCCCTTG ATGGCAAGAN CTGACCCCTC CATCCTGGAG AAGAGGAGAC CAATTINATA TTATGGAGGC AGAATATACA
 GGACTGTGTG ACTAATTGGA CATGTGTGTC CATGGAGCTT GAAGGGGACA GAACCACAGG TGCAAACTG GTGTAGGTAG
 TGCTGGCCAT TGCTCAGAAC TTTGTGTGAG TTGAGCCAG GCCTCTGGTT GCAGGACTCG TGAATGGAGC AGTTCTGAGA
 ACCACCCCTT TGCTAAGGGA GCTTNGGAGC CACATGGCTG CTCCCTTCAC ACTGGGTAACT AGTGTAGTAT CCTGTGAGAG
 AATAAACGTA TTCATTTAAA AAG

SEQ ID NO:1516: (Length of Sequence = 380 Nucleotides)

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AAAGACTCTT TGCTTTAAAT AATACTACTG GGCTGATTAC ANITCAGAGG TCCTNNGATA GAGAGGAGAC AGCCATTAC
AAAGTGNACG TGCTGGCTAG TGACGG

SEQ ID NO:1504: (Length of Sequence = 311 Nucleotides)

ACTGGATGGA TGTTTGATCT GTGTGGTCA TGAAGTTGTT TTTTTTTTTT TTAAAAAGAA AACCATGATC AACAAGCTTT
GCCACGAATT TAAGAGTTTT ATCAAGATAT ATCGAATACA GCATGGGATT GGGAAAGTTA ACTAAAGGTA TTTGAGCTTG
CACTGGATCT TGAAAGGTAG AAAAAGGGAG CAGGAGGAAA CTCATCCAGG TAAGAAAAAT AGACTGTNCA AGATGGGCAT
GAGAAACAGT GAGGTCCNN GCTGGAGGTG GGTGCTAGTC ATGTTGAGCA CTNCTGGCAG GAGAGGTTTT T

SEQ ID NO:1505: (Length of Sequence = 363 Nucleotides)

CCACTCATGG CAGAAGGGAA GGGGAGCTAG TGTGTGCAGA AATTGTATGG TGAGAGAGAA GAAACAAGAG AGAGGGAAGG
GAGATAGCAG GCTCTTTTCA ACAACCAGCT CTCATGGGAA ATCATAGAGT GAGAACTCAT TCACTACCAT GAGAATGGCA
CTAGGCCATT AATGAGGGAT TCGCCCTAT GACCCAAATA CCTCCCATTA AGCTCTACCT CCAACACTGG AGATCACACA
TCANCATAAA ATTTGGAGGG GTCGAATATC CAAACNTAG CAACTTGAA CCACCAGAAG CTGGAAGAGG CAAGGAAAGA
TTTTINTCCTA GAGGCTTCAG AATAAGGTAT TGCAATTCTG AAA

SEQ ID NO:1506: (Length of Sequence = 177 Nucleotides)

CGGACAGAGC AGGGCAGAAA AATGAGGGAA GGATGACAGA AGCTCATCAG AAAGCCAGTA ATACATAAGA TTAGTTTTNT
CAGCAAAACC TNGTAACTT TGACGTAAAGACAAATAT TTTGATCTCT CATTCCCACT CTCAAAAGG TTTCTAGTTC
ATATTGTTTT GCTAAAA

SEQ ID NO:1507: (Length of Sequence = 345 Nucleotides)

CTTGCTTGAT TTTCCCTGT GTGTGAGAGA ATGTGCACAT TGAAAGAGAG GGAGCTCTCC ATCACCAGA GAGCCCAAAA
ATAGCCCAAC TGATCATAGC CGTTGTAAAA ATATTTCATGG ATGTAAGGAA AGATCCTTTC CCAGTCTGAT GCTCCTTGAC
TTGTGATTG CTAAATTGA GAAGCCATCA CTTACACAAC CTGTTTTATA GACAAATCCT TCCAGTTTCA GAAGAAAAAA
TGTCATCTAT CTCACCTCC ATCTTTTTT CAAACTTCGA TAGATGAGAA GAAAATGGTG AAATAAATTT TTTAGAATCA
GTTTTGCAAG ATTGGTTTC AAGGA

SEQ ID NO:1508: (Length of Sequence = 326 Nucleotides)

AGTTGGATT CAGCTACTCA GAGTAATTGG AAAAGGCCAC AGCCTGGTGG GCTTCACAGC TTTCAGAGAC CTGGTAGGGG
ATGGCTAACA GGTTCNCTG CCAGGAGACA AGTGGCAGAC CCAGGTGIGA AACTTTTACA GGTCCACCA AGCCTTTCTT
ATGGAGCACA GAGCATAAGG ACAACTTCTG CAGAAATGGA ATGGGGTACT TGGAAACCAA AATACATACA CCTCCTTTCC
CACCTGCCCTC CAGCTTAGTA GCCCATAGTC CTCCTTGTCC CTCACACTGA GCCAGGGCCT GNCCTAGATG ATGAAATGCA
TGGCCT

SEQ ID NO:1509: (Length of Sequence = 329 Nucleotides)

AGTATGGGTC CCTTGGTACT ACTCAAGGTT TACAATATTG CATTAAACAC ATTGAAAAAT ACACGAGAAC CTTGAGGGAT
CACATTTTAC TGCAATATGT GATTTCCTGG TGAGACTCCT TGTGCAGAGA TGAFTAGCTC ACAGAGCGTT GTAAGCACGT
ACTGCAACA CCTGAGCATG CCGCAATGGC AACAGGAGGT ATCTTCACAA TTATGATGGT AGTACAGTAT GTACTGCAGT
TGTTTACACA GTTATGATTT AGTACTACAT CTTTACANIT GNTATTNINC TTNCTATTTT GAATGGTATG TACTGTCTGT
GTGTACATA

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CACACACATA CAAATCTGT CCATTGCGG GAGNAATNTG TATGTATGTN AGTTGGAGGG TATTAAAAAT CAGTTTTATT
 CCAAGATT AAAACTAGAC ATGACTTAAA AACAATTTCT GGAGCACTGC TTGCTGACAA TCTCGTAGTT CTCIGCTGCA
 TTTGAGTGCA TTTTGGGCC AGTCCATCAG GCGGTACCAT GGGATTATAT TTGAATGTGT GGTGCATCCT TCCTGGATGA
 AGGATGTGTG AGGGACCTTG AACCTCAGCT GTATTAAACT GTAGCGCCTC CAGTCAGTGC ACTAGATGAA ACTTTTAGAC
 ANCCTGAATT CTGTTGGGTC CNTTCPTTTT CCTTTATGTA GGCAGNCTNC AGCATG

SEQ ID NO:1498: (Length of Sequence = 281 Nucleotides)

TTTATAGGAC TTCTAATCTA ATTTNCCAT AGTGTGACTA AAAGGGAGGC AAATTATTGG AACGGATTAT TCAAATGGNT
 CCTTAAATAT TGCTATGTAT AATAAGCCAG TTATATATATC AGGACCATGT TCTCTGTAGG CCACGTGTTTT NCTCTCTCAT
 TCTCCAGTGG CGGCGCGGG GAAGGCGGAG GCAGAGGCAG CAGCAGCCGC GCTGGCTGCA AATGAATGAN CCCCCAGCTT
 GGGGGGAGGA CTCCAGGTGA GCCTCTGCCC TOGGGAGGCC C

SEQ ID NO:1499: (Length of Sequence = 395 Nucleotides)

TTTATCACA CCCTGTTTT CAAGGGTCCT GTTACGTACC ATTACCAATT CTGCTTAGCA ATGGCTGTGT AGATGGCATT
 TATTCCTTCA GCATGTATTT TNATGTTCAC CTTCCTCTCA CCTAAATTCC TCCCCACCC CAATAACAAT TAGTGTCTCT
 ATTTGCATGT AGCCAGAGCA AAAAATGATT TCTTTCCCTT AAGTACTAT TATTATAAAA GGGACGATAA ACACATGAGT
 CATTATACCA CAAGTATAGT GTGGAAAGGA CTCTAAACAT AGGCTCACTG AAGAAGGTGG CATTTGGGCC AGGGCTCAAA
 ATAAGGCAGA TTCAGATTG AACTGAATAG ATGGAGGAGT CATTTCAAAC AGAAGGAATG NCATAACATG TGGAG

SEQ ID NO:1500: (Length of Sequence = 272 Nucleotides)

CTGAGTAAGN GTTCCAGTC GGTCCCACTG GTCACAAATT TTNIGGCACC GATCATTGAC ATTCACAGCG TCGTGATAGT
 CCAGTTCAAT GAGCTCCTGC GCGATGGCTG CGATCTGCTC CACGCGGTCC TGGTGGCTG CCAGGTGCT CTGGAACGNC
 TCGTCTTCC GCAGCAGAGC CCGNACCTCT NINAGCGAG CCGACTCGTA ATCCTTNTGC AGCAAGATCT GCTCTTTGCC
 ATAAGCCCAA GTCTGTGCG TTGAGGCCTT CT

SEQ ID NO:1501: (Length of Sequence = 394 Nucleotides)

TTTTTTTCC TGGACCTGTC ACAAGCTTTA TTGTCCGAG CACAGACTCG CCACACTTCA ACAATTCCAC TGTGGGGAGG
 GGAGGGGTGA ATGAAGGACC TGGGGAGGG ACATGGCTGA GCCACANCCG GGCGGCCACA CGGGGCGGC TGAGAGGCC
 ACGGAGGCAG AAGCTCCCAA GGAAACCGCT TCTTGGACAC CCGTACCAG GAGCCACCT CCGGGGGCTC AGNTCCTCCC
 GGCACCTCC TAGATGGACC TCTGGCTGTT AGTAGACTAA TCGGTGCCCC TACCGATGGG GCAGAGCTGC CTGATTTTGT
 CTAGAAAGAG CTGTATTTGA NCCINGGTTA GGNCACTAAA GCATCGTCT AGACGGCTGT TAATAGAACT NCAT

SEQ ID NO:1502: (Length of Sequence = 373 Nucleotides)

GAAACAAGGC ATAATGTTGT CACAGAATCA GAGATCCAGT CTCACTTTTC CACAAATCTC CAAATCTCCA GTCTTATCTT
 GTGTGCTCTA ATGGTTTGGT TCAATCCCTT TCCAATCTTT GTTTTCAAAG CATGGGGCCT GAGTGTCTC CACTCCTCCT
 AAGAAAGGAG CTTGGGTGGA AGGGACCATG CTGACCTCCT CCATCAGAGG GCTCTTCCAG TAGTATTCTC GGATGCAACC
 TCCATTTCTC AGTTACCATT APTTCTGTGA TCAGCTTTGT CCTTCTGGN GGGATGCACA GTGATCOGGG CCACCACTGT
 TGTGTCTGTG TGCTCTGCT CTTCCTATG GTTTCAGNT ATTTCTGGG GTT

SEQ ID NO:1503: (Length of Sequence = 266 Nucleotides)

GNCAACAGGC CAGTNTTAA AGAGGTCAA GTGGAGGTGC ATATTCCAGA GAATGCTCCC GTAGGTACCT CTGTAAATCA
 GCTCCATGCC ACTGATGCAG ATATAGGCAG TAATGCTGAA ATCCGGTACA TTTTGGTGC CCAGGTGCGC CTGCAACCA

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TTCACCTACCA AAACCAGTTA CAACAGTTC AGCCAAATAA CACAGGCTAC CCCATATGCC ACGACACAGA TCTTGCAATC
 CAACAGCATA CATGANTTGG CTGTGGTCT GCTGATCCN CAATGGAAAA GCTCAATTCA GCAAAAAACA GATCTGNTGG
 GATTTGGTTA TTCTCTACCT GATCAGAACA AAGGTAAACAN TGCCITACTT TACATTCCIG ACTACCGNIT GGCTGAGGGA
 TTGINTAATA GAATGCCACA NAACCAGTCT NAGGATTTTA GCANCCACCA GCTCTNACAA CAGCTCAGGA AGGAGTTGGC
 AGINTCTCAG GTGGG

SEQ ID NO:1492: (Length of Sequence = 321 Nucleotides)

GACTTCATAA AACATCCTTT ACTATATTTT NAAAGAAAGC AGAAGTAACA GCAATATATG TAAAAGTAAT GNTTTAATGN
 CTATAAGCAA GNCAAAGCAA TAGAATTGTG CTCTTTTTC AGACTGGGNN CAATGAAATG TTTAGCTACA ATTINCCAT
 ACAACATGA AACAATATTC ATATAGNNIA ANCACCCTCA CAAATAACTG ATGGGTGATG ANCACACACC AAGTTCGACC
 AAAGCAAAAA NTAACTGAA AATTGTGGG TGGGGTTATT CATATTTTAA ATTCAACATG CTGCTCTAT TTAATAATAC
 C

SEQ ID NO:1493: (Length of Sequence = 315 Nucleotides)

GACGGAGCGA GGGGACAGAG CCCAGGGATG GAGGCGGGAT GCGGGGACAA GAGCCAGGG ATGGAGGCGG GATGCGGGG
 AGCAGCTGGT AATGTGACAG GACTGGGAGA GGGCGGTGTC CAGGTGGAGA GTATTTCAAG GAAGAGAAGG ATTAACAGCG
 TCCACTGCCG CAGATGGGCC AANCAGAGAT GGGACTGGAA ACCAACCACT GCATTTAGCA TCCTGGGGNC TGCTNATAAC
 CTGGTTTGA TGGCTCCTCA AGAAGAGCCA NAACCTTINA AAGTTAGTTC AAGAGAGAAG GGGGAAGAG ACACT

SEQ ID NO:1494: (Length of Sequence = 405 Nucleotides)

AAAAGTTGAC AAAACATAAA GTATCTCTAG ACAGCAAGGA AATAATTTCA CGAGATTGCT AAATTGATGT CAACACCTGC
 AGTCTAAAAT TTATACAGTT CAATATGTGT CATTIGATCA CTGGCATGTC AAATATAGAA CAGCTATGAC TTTGCTGGCC
 AGTAAATTAT CTAGCAGTGA AAATCACTTT TTAGGAGAGT CGCAATCAAA CATTTGTTAA CGTGGGAGCC TATAAAGATG
 CAAATTCCTG AACCAACAGT TCTAAGAAAA GTACATTGGG TCACTCTGAA CAGGTGGTAT GAACATTTGA TTTAACTGCA
 AGATCTNCNG CINTTTACGG GCTTTGTAC CATCGNATGA ATCTTACATC CGCTGATGAC TNAGAGCAAG CAGGGGCGAG
 CTGCC

SEQ ID NO:1495: (Length of Sequence = 364 Nucleotides)

CGTCTAATGA AGAGCTTCGA AACTTGCTCT TGTCGGCCA TGTTGGATTT GACAGCCTCC CTGACCAGCT GGTCAACAAG
 TCTACTTCTC AAGGATCTG TTCAACATC CTTTGTGTTG GTGAGACAGG CATTTGGCAA TCCACGTTAA TGGACACTTT
 GTTCAACACC AAATTTGAAA GTGACCCAGC TACTCACAAT GAACCAGGTG TTGGTTTAAA AGCCAGAAGT TATGAGCTTC
 AGGAAAGCAA TGTACGGCTG AAGTTAACCA TTGTGACAC CGTGGGATTT GGAGACCAGN TAAATAAAGA TGACAGCTAT
 AAGCCGNTAG TAGGNTATAT TGATGCCAG TTGAGGNTCT ACCT

SEQ ID NO:1496: (Length of Sequence = 370 Nucleotides)

GTCTCTTGA GCAAGGACCC AGTTATTCAT CTTAATTCTC AGGGGAATCT CTGTAGAGAT GAAAAGCAGG AGAACCAAGG
 CAGCCTGGTC TCCCTGGGTG ATGAAAAACA GACTAAGAGC AGGGACTTGC CTCCAGCTGA GGAGCTTCCA GAAAAGGAGC
 ATGGGAAGAT ATCGTGCCAC CTGAGAGAAG ACATTGCCCA GATTCCTACA TGTGAGAAG CTGGTGAACA GGAGGGCAGG
 CTACAAAGAA AGCAGAAAAA TNCACAGGA GGGAGGCGGC ACATCTNCCA TGAATNTGGA AAGAGTTTIN CTCAAAGCTC
 AGGCCTTAGT AAACACAGGA GNATNCACAC TGGTGAGAAA CCTACGGAT

SEQ ID NO:1497: (Length of Sequence = 376 Nucleotides)

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SEQ ID NO:1485: (Length of Sequence = 334 Nucleotides)

GAAGGAGCGG GGAACCAAGT TCTCACTCTC CTCCCACTTG CTATTGTGAG AAGAGCGAGA TTTCAGGGCA GCAGAGAGCA
 TCAGGAGATC AAAAGAAGAC ACTGCTGGGT GGTCCCTTAG CAAGTTTTAG CTTCTTINCC TGCTGGGAGA GTATTCCCTG
 GGCACAGTGC CAAGTGTCTC TAAGAACTA GTCATGCCCTG ANCTTAAGGG CTCGCGGATT CTGGGTGGTG GATTTCCTTA
 GGCTGTCTG AGCCTGCCAG TGCTCTCCTC TGTCGCTCTG ATTTCCATTC ACGCTGAGCA GTCTGCACIN CCTTGGACAG
 ACCCACTGGC ATTT

SEQ ID NO:1486: (Length of Sequence = 164 Nucleotides)

CTGAAACGGA AAGATGGCGC TGCTGTINCTT CTAAGCCTAG GCTTCTTGCA CTAAAGCACC AAGGGCATCG CACACAGGCT
 TGGCAGAGGG GCCATGGCCA GANTCACCAC CTTAGACAA GTATGTTGGA GGTCTCGAAT CCCTTGGCAC CCCCAGCAT
 GCAG

SEQ ID NO:1487: (Length of Sequence = 298 Nucleotides)

TTGAACCCAG GGGGCAGAGA TTGCAGTGAG CCGAGATCGT NCTGCTGTAC TCCAGCCTGG GCAACAGAGC GAGACTCCAT
 TTCAAAAACG AGAACCCAGA GGGCTCACTT GCCCCTTCCA CCACACAGTG AGAAGGCACC ATCTATGAGC CAGGAAGCGG
 GCCCTCACCT AACAGGATCT NCTGGGCCTT GACCCAGGNC TTTACAACTT CTAGANCCAT GAAAAATTTC TGTGTTCCT
 AGCAGNCCA ACAGAATTAG AACCATTAAT TTCTATTTCT CCTTTAGCTT AACACTGG

SEQ ID NO:1488: (Length of Sequence = 343 Nucleotides)

TTGCTAGTTC AGGNTCAATG TCATGGCTGT AACTAATATA GTACATTOGG CAGTTGCAAC GCGAAATGAT CCGCTGGACT
 TGCTGGGCTT GCTGTGCTC ANCTGGCTGG TTCCAATCTG TGGTTGIGGT AACCATGCCG CCCACTGCCCT GCCCACTCTC
 CATCAGCTCC TGCACAGAGT CCAGACTACG CTGCGGGTGC TCGCTCTTTT GCCCAGGTTG AAGTGCAGTG GCGCAATCTC
 AGCTCACTGC AACCTCCGCC TNCGGGTTT AAGCAATTNT CCCCACCTCA GCCTTNOGAG TAGCTGGGAT GACAGGGGCG
 CGCCACAACG GCCAACTAAT TTT

SEQ ID NO:1489: (Length of Sequence = 412 Nucleotides)

ATTACCTTTT TATAACCCAA GANTGCCATT ATTACACCCG GAACCTCAC CAAATAAGTA GGAAACTAC ACTGAGAACA
 ATTCGGCCCA GCTGTCTCTG GCCCATTTCC CTTTCTACCG CCTCTGTGC ATTCCAGCAA TCTAACTCGA TGAATGATCT
 TCCAGTTGGA AAGATGGGGA CTTCACAATG TGCAGACCCA AAGATCTGTC TTCCAAGGC CAATCACCAC TGTATCCTTC
 GTTCCTTTAA ATGTGTTGT TTATTGAAT ATATTAAGGA ATAATATCAA GGGTAATTAT CTATGTATTA AATGTATGNT
 TAATTTTTTA GGGGACCATC ATACTGTTTT TCCACAGTGG CTGTACATTT TACAATTCCC ACCAACAATG CACAGGGTTC
 CATGGTTCCT AT

SEQ ID NO:1490: (Length of Sequence = 356 Nucleotides)

ATACCTTCTT TCATTTAAGC CACCCAGTCT ATGGTACTTC GTTATGGCAG CCTTAGCAAA CTAATACGGA TTOCTCATCA
 GGTTGAGATT TINCTAAATA AAATGTTTTT GTGAGGGTGG TACAAGCAAC AGTGATATAT TTCTTTAAGT ATTTTCCCCC
 AGCCAAATTC CAACAAGACA ATAATGTCTA ATGCACTGTC TGGTGAATCG GAAAATCTCC TGAATGAAAT AAGAGCCTCT
 AATACCCAAA AGGGAATGAA GTGAGTCATC ACCACAGCCT GTGAATGAAA ATAATGCTC TGAGGAAAAC ACATGTAAAA
 AATGACACCA TGTGGATTAA ATGGGGGAC ACAAGT

SEQ ID NO:1491: (Length of Sequence = 335 Nucleotides)

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TGGGTTTACG ACATTACTAA TCAGGGAAAC CTTTGTCCCG AGCAAAGACA TGGGGTGAAG GGACTACAGC GACAGGC

SEQ ID NO:1479: (Length of Sequence = 389 Nucleotides)

GCTAGAGNGC CGGCTTGGCG GGTGAGTGG CCGAGCTAA GGGTGGGAG ACCCAAGGGC GGCGACTACG ACGGCGTTGA
TATCGGTGGT AACGACGGCC TCAGCAGGCG GGAAGATGA AAGGCCGNT CGAGCTGGGA GATGTGACAC CACACAATAT
TAANCAGTTG AAAAGATTGA NTCAGGTCAT CTTTCCAGTC AGCTACAATG ACAAGTTCTA CAAGGATGTN CTGGAGGTTG
GCGAGCTAGC AAAACTTGCC TATTTCATG ATATTNCTGT AGGTGCAGTA TGCTGTAGGG TGGATCATTG ACAGAATCAG
AAGAGACTTT ACATCATGGA CACTAGGGAT GTNTGGGCAC CTTACCGAAG CTAGGAATAG GGACTAAAT

SEQ ID NO:1480: (Length of Sequence = 384 Nucleotides)

CTGAGAGCCA GGAGCTCTTG CGGAGAAGCC ACTGTCTGCA CGCCACCTGC TTCGATGACC CTGCTCTGCC ATCCCTGTGC
TCCAAGGGCC GGGCCCTGCC GTTGCTGTG CCAGACGGGT CTCAGGGAGA TGCCGGCCAG CAGGTATGCA TGGCGAGGCC
TGGGCATCAA GGCCCGGATT CTATGGCTGC CAGTTTCATT CTCTCGTTGT TTGTCCCTT AGCAAGACTT ATGAGGTTCC
TTGAGGACAA GACTCCCTCC TGCCACCTGG TCTGTTTCCT GAACATTAC TGCCTAGCA CGGNCCTGGG ACGCAGNCTT
TGGGAATCAG GCGTCCGCC ATGGTAGAGC GGCTNGCACT GCTCGGCACC GTGACGGACG TTTC

SEQ ID NO:1481: (Length of Sequence = 257 Nucleotides)

ATGTCTAGAG CTATTCTGTT TTCCAAGCC ATTTGGCTAG TAGGCCCTAA TTGGTCAGTG GGTTCGTACC CCCCAATCCC
TACCTCAGCA GCAGGAAAGG GAAGTGCTGG TCTCCACCTG TNCCTACTAA GGCCCGTGG TATCTGGCA GAAGCCTCTG
CATGTATCTN CGCTCTGAGG ATGGGGGTTT NAAAACAAA TAAGACCCTA CGTCTACTA CCTTGAGCTT GGCTCTAAAA
CCACGGGAAA GGAAGAG

SEQ ID NO:1482: (Length of Sequence = 345 Nucleotides)

AATTGAGCTC AGACTAAAGG AATTCTTTT TGAATAATA GTGATTAAGT TATGATATTC CTGTTGGCCT AAGAACAATG
CCTATGATTT AGTTGTGTTA TGTATATTG TACTTATAAC CAAACAATCG ATTGGGTACA AGTAGCCTTA GGGCAATACT
TCCTTAAAAA CATGTTTCTG ATAACTAAA GCTTTAGCAT TAACCAGAAG TCATAATTTA ATAGTATTGT AAAAATACCT
CATTTATTTT AAATCCTGTG TTGGGGTAGA GGATTACAGT TGTCATTTCA AATACATGAA TCTCTTGCA AAAGNGTAC
TTTGACAGTT TCATGGGAGG TCAGG

SEQ ID NO:1483: (Length of Sequence = 344 Nucleotides)

CTGATGTACT GTTTTAATAT GCTGAGTACT GTTGATTCAA CAACAACTT TAATGGGTGA TGAGCTTTTG CATAACATA
TGAATTINTC AGCACTTCTG AAAACTGGCC ATCATTTTNC AAATTCACAA TTTGCTGGAT GTCAGGGAAC AATAGGAAGA
AGAATGAGCG TCAATTTTCA TGTCTTCCIT TGCTTCTTCA CTGGCCTTCC ATAGAAGTAG TCAGAAAAA ACAAGCACC
ATCAACCACA CTTACAAAC AATTATGTT GGCCTAAGCT TTGCTCAACA TTCATATGAC AGAAGGTAGN ATAATGAAAA
GGGACTGCTG GGCATCACTT TCCC

SEQ ID NO:1484: (Length of Sequence = 380 Nucleotides)

TTCTTAAAG CAGTCTTTCC TACAATTGT ATGCAGTAAG TCACCTAAGC ACTTAAGTGT CATATGGGTA CTTACATGGA
ATTAGAGCAC TTCTGAATG GAATTAGAAA AAGGCAAATT GTGCATACTA CTGATGCATT CATTTCTTAC AGAGATATGA
TACCAAGGGC CAATAAGTGA ATAGAAAAAG GGAGGAGGAT TTATTAATGG AATGAGTTCT AACCTGTCT CTACACGCC
ATATGACTTT GGGNTAAATA ATCAAACGCC CAATGAGCTC AACTGTCTAT TATTAGGGGA ATTTAAATGA GAGAATGCAC
ATTAATTATG CATGTCAGAG TACATGGGAA AATAGTAAAA GCTTAATATT TAATACGGTC

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SEQ ID NO:1473: (Length of Sequence = 434 Nucleotides)

GCCTTTAATT TGGTTTINCT ATGCCAGTAC AGAAACATCT GGACAACACT CTGAGCCTG CAGAGGCTCA CGGCCACACC
 CACTTCTGCC GCAGGACTGT CTGTTGAGGA GCOGAACOGA TGAGGCACAG TAGCCAGGCC CTCCOGAGGG CTCCAGAAGC
 TCTAGGTTTA CGGGGTCACC TTCTTGTTAGG TGACGTGAAG ATGCTGAGTC ATTGGCTGTN TCGTGGTTGC CATGGAGACC
 GTCIGCTCAA GTTTGCCTTC AGAATTGAGC CTGAACITCC GGGTGATCTG CTCTACGTGG GGCTCCTTGG CGAAGGAGAT
 CCTGGCGATG GAGTGGGATG CGATGCACAG NTCCTGCCCC TTCAACTCGC CCTCCTNCAC TTTCCANCAC GGCTGTTTTT
 TTGGCGTGAC AAAAGGCCAC CTTTTTGGTG TCGG

SEQ ID NO:1474: (Length of Sequence = 402 Nucleotides)

GACGTINAGG TGGGAGGTTT GTTTGAGCAA CATAGTGAGA CCCGCTCTCT ACACAAAAAC AAAAAAATA AAAAATTATC
 TGAGCATAGT GGAGCATGGC TATGGTCCAA GCTACGTGGG AGSCTGAGGT GGGAGGATTG CTTGCNTCCA GGAGTTCAAG
 GCTGCAGTAA CGAGTAATGG TGCTACTTCG CTTGAGCCTG GGGACAGAG CAAGACCCTG TCTCGAAAAA ATAAATAAAG
 TAAATAAAGT TGAGAATTTT GTATTTTGGT ACAGAAGGTC TATGCCITTN AAATGCTCCA TTTGGACACG CTTAGGGCAG
 GACGCTCTGA AACTGGGAAG CCTGGGGCCC TGTACANTCT TGGCTGTCCC CTGTACANTC TCCTAACTCT AGAGGGCTGG
 TT

SEQ ID NO:1475: (Length of Sequence = 324 Nucleotides)

TTGCATACCT GTGCTGTGTC AGACCAGGCA GAGTCATCTC ATTCCACTGG TCTAATGGAT GGCAATTGAA TTTAATTAAAC
 AAAACTCCTT TGACTTAGTT TCATACTGTG CTGAATGTAA TGAATCCTC TCTGCCCCC TTATCTCTCT CTCITTCCT
 CTCTCTCAAC TAAAAATTGT CCTTAACTAA CATCCACTTT AAGAATATTA AAGGCTATAC ATTATACTTA AAAGATACAA
 TACAGTCATC CCCCTTTCCA TGACTTAAAT TGTATAACAT AAAATAATTA AAAAGTACT TTTGGATAGT ATACACAGTA
 TAGG

SEQ ID NO:1476: (Length of Sequence = 244 Nucleotides)

GAAAAACCAG AAACTCAAAA TCAGAGTGCC TCTCTCTC CAAAGGAACA CAGCTCCTCA CCAGCAACGG NACAAAGCTG
 GACAGAGAAT GACTTTGACA AATTGAGAGA GGAAGGCTTC AGAAGATCAA ACTACTCTGA GCTAAAGGAG GAAGTTGCAA
 CCNATGGCAA AGAAGTTAAA AACTTTGAAA AAAAATTNGA CGGATNGATA ACTAGNATAA CCGATGCAGA GAAGTCCTTA
 AAGG

SEQ ID NO:1477: (Length of Sequence = 338 Nucleotides)

ACAACACATA CTTGAAACTG ATTATGACTG INTTGAATG CATTTTGATT CCTTAGCTAT GCCTCTCAGG TGAAAGGACC
 AATGGCAAGA GGAAGCAGAG GATTGATGCA CTAGAAAATA CTGAGAGAGA TCAGAGTATT CTGTCTACTT CACTGAAGAT
 ATGGTCTATT GAGGGAAAAC TAATTAAACAG TTGATCCAAG GAACAAAAGA ATGCTGTTAT GTGACATTTT GTTGGGAAAC
 TGACTGTAAT AATAATAAAN CAAATGTCCA GAGGAATGTG TCACATAATT NCAGTGTFTA TGGTTGATAA TTCAAAGGCA
 TAGATGAATT GGGATTCT

SEQ ID NO:1478: (Length of Sequence = 397 Nucleotides)

ACCCITTTCCC ATTCTGATAA TCTGGCCATG ACTAGCAGAA GCACAGCTAG GCCCAATGGG CAACCCAGG CCAGCAAAT
 TTGCCAGTTC AAATGGTCC TGCTGGGAGA ATCTGCAGTG GGAAAGTCAA GCCTGGTATT ACGTTTGTG AAAGGGCAGT
 TCCATGAGTA CCAGGAGAGC ACCATGGAG CGGCCTTCT CACCCAGTCC GTTTGINTAG ATGACACAAC AGTGAAGTTT
 GAGATCTGGG ACACAGCTGG GCAGGAGCGA TATCACAGCT TAGCCCCCAT GGTACTACAG GGGTGCCCAA GCTNCAATCG

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TGATAAAAGG AAAACGTTTT GATTATAGT ACCAAGTGCT TAAACACAAG GATAGTGITA GATTTTCGAG TGACTTTCCT
 TTTTGCAATT TTTGGCAGTA AAAGCCAAAC GTTGTATTG TCCTTTTCAG AGTTGTCCAG CCCTTTTTTC CTTTGTCOA
 AATGATTCTA AATAGAATCT AATAAACCA TGTAGCATT TTTTTTCTA AATGAAGCCC CAAAAAGAA AAGTGCCTTG
 CATCATTTAA AAAAATAAT TAAATCCTCA TGGCCTCTAA ATTAGGTATG TAGGGCACTG AAAAGTTCTT AACATTTTT

SEQ ID NO:1468: (Length of Sequence = 352 Nucleotides)

TTTGGTTAAC ATTCCAAACA TGTATAACCA ATTAACATGG CCTAGGGTTT TCTTTTTATT GGTATTCAC TACGTAAC TT
 GAATCCACAG ATATAAGCAG TATATAACCA GAAAGTTACA AGTAAACACA AATTATACAT GCAAATTTCT GTTCACAAAG
 GTCACATGTG CAGGTACATG ANTTAGAAGC GTGCATCTAG GATTATGGCC AAAGTGT TTT AAAAATGCAG AAATGTAAAA
 TTACATCTTG AAAATATGAA GAGATGGTCT ACACACTTCA AAAATCAAAT GTTGCTTATA CCAGAGATGT ATGTCAATCA
 CGGNTTCAA GTGACAAGCA GTAAGGATCC TC

SEQ ID NO:1469: (Length of Sequence = 427 Nucleotides)

GAGATGGAGT CTGCTCTGT NACCCAGGCT AGAGTGCACT GCGGAGATCT CGGCTTACTG CAACCTCCGC CTCCTGGGTT
 CAAGTGATTC CCCTGCCCTCA GCCTCCCAAG TAGCTGGGAT TACAGGCGCC TENCACCGCA CCCAGCTAAT TTTTGTATTT
 TNAGTAGAGA CGGGGCTTTA TCATCTTGGC CAGGCTGGCC TCCAACCTCT GACCATGTGA TTCACCTGCC TCCACCTCCC
 AAAGTGCTGG AATTACAGGT GTGAGTCACC ACACCGGCC GGATTCTGTT AGTTTCTTT AATGCATATT GAGTTCTTT
 AGTTTAAACA CACTTAT CTGGGTGGA CCCAACTAT TCACTATGTT TCTGGGGGA NAGCTINGAA TCTTGGGGTG
 GAGCCAATT TGTAAATAGC CAGGGTG

SEQ ID NO:1470: (Length of Sequence = 426 Nucleotides)

AGGAGTTTGA GACCATCTG GGCAACANAG GAAACCCCG TCTCTACAAA AAGAAAATTT GGTTTTATA TTTATTTGTA
 TTAATTTTT TAGAAACATA GCTGGGCATG GTGGCACAG CCTGTAGTCC TAGCTACTCA GGGGCTGAG GTGGGAGGAT
 TGCTTGAGCC CAGGAAGTTG AGGCTGCATT AAGTGTGAT CACACCACTG TNCTGCAGCC TGGGTGACAG AGTGAGACCC
 TGCGACTCCA GACAGGTGCA CACCACCACA CTCAGCTAAT TTTTGTAGA AATGAGGTCT CACTATGTTG CCCAGGTTGG
 TCTTGAAC TCAGGCTCAA GTGATCCACC TGTCTCAGCC TCTCAAAGTG CTGGGATTAC AGGCATGAGT CACAGTGCCT
 GGGCCCAAAT TCATAGTCCT AAACAT

SEQ ID NO:1471: (Length of Sequence = 372 Nucleotides)

AGAATATTAA AAAAGACCAG ACGCTTAAAG CAAGANTTGA AATACCTAGT TGTAAAGATG TGGCACCTGT GGAGAAGACT
 ATTAAGTTGC TTCCAGTAG CCATGTGCA AGACTACAAA TATTCAGTGT AGAAGGACAA AAGGCAATTC AGATCAAACA
 TCAGGATGAG GTTAATTGGA TAGCGGGTGA TATTATGCAT AANCCTATTT TTCAAATGTA TGATGAAGGA GAAAGAGAAA
 TCAATATAAC ATCAGCTTTA GCAGAAAAA TTAAAGTTAA TTGGACTCCT NAGGTTAACA AAGAACACTT GCTACAGGGT
 CTGCTTCCTG ATGTGCAAGT ACCNACATCT GTAAAAGATA TNCCTATTT CC

SEQ ID NO:1472: (Length of Sequence = 332 Nucleotides)

GGTAGAGACA GGGTCTCACC CTGTGTCTCA GGCTGGTCTC AAAGTCTTGG GCTCAAGCNA TCCTTTCACC TTGGCCTTCC
 AAAGTCTTAG AACTGGCCAG GGGTGGTGGC TCATGCCTGT AATCCCAGCA CTFTNGGAGG CAGAGGCGGG CAGGGAGTTT
 AAGACCAGCC TGGCCAACAC GGTGAACCCA CTCTCCACCA AAANTACAAA ATTTAGCTGG ATGTGGTGGT GGGCGCTCT
 AATCCCAGCC ACTCAGGAGG CTGAGGCAGG AGANTCACTT GANCCCGGGA GGCGGAGGTT GCAATGAGCA GAGACGGCCT
 GGACGACAGA GT

343

SEQ ID NO:1461: (Length of Sequence = 343 Nucleotides)

TGGGAAGATC AGGTCTTACT TGTTTTCTG TCCCCTCCAG CGCTAGATCA ACACAGTGT AAATTAGTTG AATTTCACTG
 GAGGAGATAA GACAGAAATG AAATCTGTGA AGATTCAGAC TTTCCTAAGT TAAAACCACT CTTGAGTTAC AGATCAAGAT
 GATGCCAGAA ATAACATCAC ACTGAAACAT CAGTCAAATG TAGTCATCAT GGCAAAGGCC AAATGTCCCT TTCCTTTTTT
 GCCTCCGCT GCCTGGGAAT TTAGCATCCC CTAAAGCCAC TCATCTGGGA CAGGATTTA GGTGTGTAC ATGTTTTTCA
 ATCTCCACAG GACCCAGCTG TGT

SEQ ID NO:1462: (Length of Sequence = 335 Nucleotides)

GGCATGGAGC AGGCAATGAC TTGTTCTAG TCGCTGAGT TATGAGCACC AGCTTGAAC TAGGAACCTCT TATAAATTTT
 TGTTTTCAAC CAAGTATTGA GTGTCTGCTA TGTTCTAGAC ACTGCGCTAG GTGCTGAAAT CTCACCTCTA CTGAGGAAGA
 CAGGAACATA AATGGTGATG ATCATGTCAT TAGAAGTGAT GCCACGGGAA TAGTGTGGGG CCTCTCCAGG GGGATCTNAA
 GGTAGGGAGA CCACACTTCT CCAGTGGTGG AGAGGGCAGA CAGCGTGTAT NGGGTCTCA AGGTCTNATT GCAAAGGTCA
 TGTTTTAGCT GTTCA

SEQ ID NO:1463: (Length of Sequence = 382 Nucleotides)

GGACCGCTTT CGGTTCTCA GGATAAACAC GAGCATGCCC ACCACGGTGA AGGCGGAGGT GACAAACACC AGCAGCAGTC
 CCGGGACCAA CACCGAGATG GACACCTGC TGGTGTCTAG GTAGGAGTTG GAGTGGCTCC CGGTCTCCGC CAACCCAGTG
 CTGTTTTTAC TGTCGAAGT TAACGTGGGC GAGATCCTAG CGTACAGCTG AGGGCAGATC TCGTCATTGG AGAGGAGCAT
 GAAATCCTTT CTAAAGAAGT TCACCGCGT CTCACACTTN AGGTCTCTCA TCAGCACTTC GGAACCCAAG CTTTCTGNC
 ACTTGCTTGA AAGGCACAAT TGTCAGGAG CACTNCCAGG GGTTCGGTG GAGGTCTAT CT

SEQ ID NO:1464: (Length of Sequence = 187 Nucleotides)

AANGACCTCA TTTCAAAGAA GAGCGTCTC CTGACAAGGG ACGTTTCCCA GAGAGGAGAC GTGTTAGTGC AACAAAGACC
 AGGCCCTGNN AGCCACGAAA GCCCTCCAGA TGCCTTGAGG ACGCGTCTN TAGCCGNGTG GGCCACGNC GGGTGGGGAC
 AGACAATGAC AAGAGGCAAG ACAGCCG

SEQ ID NO:1465: (Length of Sequence = 276 Nucleotides)

TTTACACAAT CAGTATAATA CTGATAGGAA AACTTGACTG AGTTCAGAAA ANGAAAACGA AGTAGAGATC TCACTTGCAT
 CAGAACAAAA TGTCATCTA TTAGCAGATA ATATTCATCA GTATTTTTTG AAAATACAAT ACCACANGAA AGAAACAGTG
 GACATTTGGA GGGCTTTGAG GCCTGTGGTG GAAAAGGAAT TATCTNCCG TAAANCTAG ATAGAAGCAT TCTCAGANAC
 TTGTTTGTA TGTTGCCCT CTACTGACAG AGTTGA

SEQ ID NO:1466: (Length of Sequence = 375 Nucleotides)

GGGGTTTINAC CATGTTNCCC AGGCTGGGCT CAAGTGATCC ACCCTCCTTG GCTTCTCAA GTGCTGGGAC TACAGGTGTG
 AGCCACTGTG CTTGGCTGGT TTTTNTTTTT TNAATGAACA TGTTGCAAT CACGCAGAGC ACCTNINATT CTGCATTNAC
 TGGGTTATAA CAAACATTGT CATCTGCGC TACATTTAAA AGGCTCTGGT GTATTTTAA TATGCTTTT CAATTTAGTA
 ATTAATTCTA ATTTTCTTT GAGCTGAGAT GTTATTCATT GTTCTCTAG AGTTGCTTTT ATTTGTTTAT ATATGTTTCC
 CTAGCATGT TTTTGTATC TCTTAGTTAT TAGATACCTG AACATTTGAC ATTGG

SEQ ID NO:1467: (Length of Sequence = 319 Nucleotides)

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TTTGGTGGAG ACGGGGTTTC ACCGTGTTAG CCAGGATGGT CTCGATCTCC CGACCTCATG ACCTGCCCCG CTCGGNCTCC
CAAATTGCTG GGATTACAGG CGINACAACC GCGCCCGGCC GGTAGCAATA GTTTTAATTA AGGTCTTAAA ATCATACAAA
AAGGAATT

SEQ ID NO:1455: (Length of Sequence = 342 Nucleotides)

AATTTAGGTA GATTAGCATT CCCATGTAAC TTACCAGAAT CAGAATGAGA ATTCAGAAGT CACCTGANIT GGCGGGGCAT
GGTGGCTCAC ACCTGTAATC CCAGCACCTT GGGAGGCCAA GGCAGGCAGA TCATCTGAGG TCAGGAGTTC GAGACCAGCC
TGGCCAACAT AGTGAAATCC CGCCCTACT AAAAATACAA AAAATTAGCC AGGCACCTG TCCACAGCCC CCACACAGAC
TCGAGGGGCC CCCATCTCCT GTTCTGAACC CAACAGGGTG GTCCCACTNT GGGACCACAA ACCAGGTATG ACTGTTNAG
AAGCAGGCTC ACTACCAGGN TA

SEQ ID NO:1456: (Length of Sequence = 296 Nucleotides)

ATCTTTGACC TATTAGGTGA ACAAATGAAC CTCACAGGAC ACACAGTATT TTTTAAAGGC AGACTCGCTC TCTTTTTTGC
CAGTNAGCAG TTCTAGCTAA CCAAGTTACA CACTGTGGGT ATTCTGCCT GCCTCTTGAA TACAAAGGCC TAGTTCAAGT
GTTGCTTTTT TNAITTTCAA TCAATTTTTT CTCTTTTCT TTTTGAGATA AAATATTAA AGTACTACT ATATATATAA
AANCTCAAAT CAACITTTTC GCCTCTCCT CGTGTACCAG GGAGTATATT CTGACG

SEQ ID NO:1457: (Length of Sequence = 314 Nucleotides)

GAGGATTCAT AAGTAGAATT TATAAAGAAC TCCAAAGAAT CAATAACAAA AAGACTGGCT ATGGCCTTCG NAGAGCAGCT
GCTGTCTGG AAATCAGAGG ACAGTGAAGG GAAGTCCGAA GATGAGCCTG ACACCATTC GACATCCGTC CTCCTGCAGG
TGGTGGAGCT GCTAGGAAAC TTCTTNIGGA CCACGGACAT GGCAGCCTGC NTGAAGGAGC TTGTTTTCCA TCTCCTGGCA
GAGCTCTTAC GCACGGTGCA CACCCTGGAG CAGAGGCGGC ACCCCGCTGG CCTGINCTCC TCANTCGCCC TCCA

SEQ ID NO:1458: (Length of Sequence = 254 Nucleotides)

GTTCAGTCA CAGATGTTTC ATTATCACTA TTCAATATTA TTAAGCATCT AATAAGTATA AGGATGCATG AGTCAAGGGT
CCCTACCTTC AGGTGCGAAG CAGGAAAGAG ACCAGATCCT AGAACAATAG GACATGGTAC CCGCTGCCTA GACGGAATTT
AGAATCCGGC TGGGTGAAG AGATTAATGA GCGAGTCATG CCATCAATGT GCTGTAACTG AGGTCTTAAA AACCACCCAG
CCGCGACACA AACT

SEQ ID NO:1459: (Length of Sequence = 343 Nucleotides)

AGAAAGGCTC AGGGATTAAG TAAAAAGGCT AGTACATCTG GGCTCCATTC CATTATTTAG TCATCCAAA GAAGTGAAGT
GGAGGATAGT GAGCATCTAG TATATGCCAG GCACTAGACT GGCTGCAGAG GATTCAAGAG TACAAAAAAC AACTTTGTGA
CCAATTTAAT TTGAATTTAC CAAGTTGAAT GGCAAAAATA TCTTAAAAAT TTAGATGCCT TGATAAATGT AGTGGTATAT
TATGATAGCC ATTCTATGCC TTGAGATACC GTGTATTCTA TATTGTATAG TTGAGGGATT GAGGCCAGTT GGGAGGAATA
AATTATAGCT TGTGCTTATC AGG

SEQ ID NO:1460: (Length of Sequence = 348 Nucleotides)

ATTGTCAACA GTGTTTTTAT TTATACCTAC AAAAAGAAAA CAAGATGATG GTATCAAAG GACAATTTAC AAATAAGAA
TAGTAACATA GCTTTCAGCA TCCTGTGCTT GANCATCACA CATCTACAAG TCTTTCAAGT CTTAATGCAA CAGGAATGTN
TCTGGAGACC NGCAAGAACA TCAATAGAGA GCACTGATCC CAAGCAAAAG CCACTAACCT TTTAGATGAG AAGTCCNCAC
AACGNATTGT TAGGGAGGAT TTGGGAGAAG CAGCCCCCTT GCTTAATACA TINGGACCCC TTTCCTCTAA GTTGAGGTTC
AACCCTTGAA TGCAATAACT TGGCATAA

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SEQ ID NO:1448: (Length of Sequence = 366 Nucleotides)

AATTTTGTGT CCTGTAGGAA ATGCTTCCTT GGGTGTGTGT ATTATAGCCC AATCCAAGTC ATCCCTGAGA ACATCCCCAG
GTTGTAAGGA TTAGTCAGAA GTCATGATGA CTGTCTATA TAAATATTG GCCTATTAACT TAAATTAGT ACCTTNCAT
TTCTCCNCTT TCTTGGGCGG GGCAGCGGG GAGTCAGGG GAGGGGAAAT AGGGAACGTN CAATTGINTT TTAAGTAATG
CTCATAAAT TCTTAGNCAA AGATGATCTT GCCCTCCACC TTGGTGACCC ACCGCATAAG GGTACATCT ATCTGGCCTG
TCTCTAGGCC TAGACAGAAG GAACAGGGAG GGTATTGTT AACTTT

SEQ ID NO:1449: (Length of Sequence = 234 Nucleotides)

GTGTGGGAG GGACCGGTG GGAGGTAAGT GAATCATAGG AGCAGTTCC CCCATGCAGC TGTCNGATA GTAGTTTCT
CATGAGATCT GCTGGTTTAA TAAGCTTCTA GTGTTCCTCC TGCTGGCACT CATCTCTCTT CCTGCCACCC TGTGAAGAGG
TGCTTCTGC CATGATTGTA AGTTCTCTGA GGCTTNCCTA GCCATGCAA ACTGTGAGTC AATTAAACCT CTTT

SEQ ID NO:1450: (Length of Sequence = 220 Nucleotides)

GCTTTTNCCT TCCCTGTTTT GTTTTGTAACT CTAAGGAAGC AGAGCCTCTG AGACCACACA CAGCAGCGTC GCCGTCCCC
AGAGGCACCC CGGCCAGGAC GGCAGGAGA GGAGACCCCT GTTCTCTCAT GCNCTGTGCG CCGGCCACGG TGTCTCCGC
AGGGTGAGGC AGGAGGGTGG GTGGAGGCGC CACTGNTCTT CAGCTGGAAG GGCGGGGCAT

SEQ ID NO:1451: (Length of Sequence = 403 Nucleotides)

CCGCTGTTCA CCTACCGCCT GATTAAACTT GCCTTCCTGT CCTCCAAGAC CAGATGATGA TTATCTCCA CGTCTAAGA
GACCAAGGC CAATGAGCTA CGCAGCCAC CAGTCCCGGA ACCCGCCAAT GCTGGGAAGC GGAAAGTGAG GGAGTTCAAC
TTGAGAAAT GGAATGCTCG CATCACTGAT CTACGTAAAC AAGTTGAAGA ATTGTTTGAA AGGAAATATG CTCAAGCCAT
AAAAGCCAAA GGTCCGTTGA CGATCCCGTA CCCTCTTTTC TAGTCTCATG TTGAAGATCT TTATGTAGAA GGACTTCTG
AAGGAATTCC TTTTAGAAGG CCATCTACTT ACGGAATTCC TCGNCTGGAG AGGATATTAC TTGCAAGGG AAAGGATTCC
TTT

SEQ ID NO:1452: (Length of Sequence = 353 Nucleotides)

TGCCATAGAGA GGGGCGGGA TTTAGAGAGC TGTTCTCTG CCTATCTGAT CGCCTCTCA GACACTGATC TATTAGTCTA
GTGCTGCAAT TACTTGGATT GTAATGTTTC CTGCAATTT TTGCTTTTCA AATCTTTTC ACCCTAACT GTAAATACGC
CAGGAGTAGG TAAAACTTA CAGGTAAACA TTGCCAAGAN ATAAGGATTT TNAITCTTC TGCTCAGTGG CATAACTCAA
ATCACATGAG ATAGATTCTT TTGCATCTGT CATTGTATT TCTCTGAGC TAATTACAG CACTTTGTCA CGTAGGNAT
TTTTTTTCCC CAGTGTCTCT ACTCTCCAAC TGG

SEQ ID NO:1453: (Length of Sequence = 258 Nucleotides)

GTGCCCCIN CTGCTTTCT GTNACCCAGA GAAAGCTTCA CAAGCATGCC TGNAAATNAG TTGCACCATT TTATTACAGC
TGAAAGANTT GANTGTAAAG AAGGAAGTTT AATAGANCA ATAATNCAGC AGATTATTG ATGGGGAGGT ATCTATTGTA
GTTTGGCCAG TGAAGGCAGG TCATAGAGGA AAATTTAGGT AAGTCGGATT TNCCTTAAAA AGAGGCCCAA GAGTTAGTAC
CTCAGGATTT TGTTTTCT

SEQ ID NO:1454: (Length of Sequence = 328 Nucleotides)

GAGATGGAGT CTGCTCTGT CGCCAGGCT GGGGTGCAGT GGCGGATCT CTGCTCACTG CAAGCCCCGC CTCCAGGTT
CAGGCCATTC TCCTGCCTCA GCCTCCGAG TAGCTGGGAC TACAGGCGCC TGGCACCAG NCCAGCTAAT TTTTGTATT

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TTGGNATTTT ATAGTGTTTT ATTTATTATA TACTCTNCIT GIAATAANNT GGTAATCTAG TTTCCAGAAT CATGCAAATA
G

SEQ ID NO:1441: (Length of Sequence = 247 Nucleotides)

GACCCCGATA TTCCGGCATC ACATAGATAT CCTCCAGATA AANGGTGCGT CCCTTCCATG TACTGTAGAT GAAATAGTAT
ATCCCATAGC CCACCACGCA GGGCCCCAGT AGCTTCCCGG GCGCTGGAAG AATCTCTGCT ACCAAACAGT GATAGAAAGG
ATTGTTNCCA AAGCCATCTG CTCTCAGGGC TTCTTCACATG ATAGGNGTTT TTTTCAAGNA ATAATCCATG CTAAGAATGG
GGTATTT

SEQ ID NO:1442: (Length of Sequence = 233 Nucleotides)

GATTACAGCC AAGTTCATGA ATACAAATAA AATAGCAAT TCCCTCATTC TCTCTTTTGT TTTCTGNTCA GAGAAATCAG
GAGATGGGAG CATTATGCTC AGAAACCGAA GAGCTCTTCC AAGAGCTCCA GCTTAGAGTC CAGGCTTCCA GAGCATGCAG
CCTCCTAACA CGTATGIGGT CACATGTGCA AAGACCTINTA TTACAAATA TTCAGAGCAG NATTTCTNTT AGG

SEQ ID NO:1443: (Length of Sequence = 288 Nucleotides)

AATAACAAT GTGCAGGTTT TTATAACTGA TCGGAAGAAG GTTGACCCNC AGTTATCACC TTIAAAAAAT GGTCTTAGTT
AGGCTTTCTC CTTTGTCTT TTTCCAGAAG AAACCTGGAG TCTGTCAAAT TTCACAAAT ACCCTGTTGA GATTTTCCTT
GGCTTTGATA AGGGTGAATT CACAGATTAA TTCGGAAGAG AATTTACGGC TTCTAATCA AATTGTTCTT TCCAGGGGNT
TTTGIGNTTA TTAGGNCCT TCTAAAGGTT AACCTAACT TTGATTAT

SEQ ID NO:1444: (Length of Sequence = 208 Nucleotides)

GGAAGTGAGT CACAGGGCCA AAGCCCCCTT TNCCTCACGT GAAGCAACTC AGTAAGATGG CGGTGCAGTG AAGCCTATTC
CCACACACCT CGGCACTGAT GGAGCAGTCT CCAAGGAAG GCTGAAAGGA CAGCAGGTGG TTGCCTINGG GTCCTTCCTT
CCCATANCTT TAGAGTGCCA TTTTTCAGCA ATGGGTAATA GCATCAAC

SEQ ID NO:1445: (Length of Sequence = 239 Nucleotides)

CCCCGGTCTC TNGGACACCA TTTTCTGCCG CTGGACGCAA GGGTTTGTGT TTAGAGAATC AGAGGGATCT GCATTAGAAC
AGTTTGAAGG TGGCCCCGTG NCTGTTATTG CACCTGINTA GGCAITTTCTT TTGAAGAAGC TCCTGTTTTT TCCGGAGAAG
TCTTCTINGC GGGATTTTTT AGAGGANGAG CAGAAGGNAC TCCTTTGTCA TACCTTGTGT GATATTTTAG AAAGTGCTT

SEQ ID NO:1446: (Length of Sequence = 243 Nucleotides)

TGCAGGGAAT TTNTTGATGC AAAACCAGGA AACAATTTAT CTCCACTGGG AATACITTTGA AGAAGGGATT AGAGCGGGGC
TAGGGCAGGG AGGATCTINTA AAAACAATA TTTGCCAAAC TAAAAACACA TAGGCACACA TGGGNATTAT TTTACTTTCA
ACAAGTTCTG AAAGTAGTAA CAAAACCAGG GAGAGTTAAA AGAATAATTT AACACTNATG NITCAGGAAT GCTAAAGGAG
ACC

SEQ ID NO:1447: (Length of Sequence = 371 Nucleotides)

AGTTATAAAT GAACATCTGT TGCCTACTTA ATAGGTCAAT GAGTAGCTGT GACCCATTCT TAATTTGTAT GTAAGCATAT
TTTTTACATA TTTGATCTA CTTCAITTTT CCTTGAAGCT TGCCAAATTG GTACACTTCA GTTTGAAGCT ATGTCTCTTA
TATGCTGTAC CACCTTCTTA AAAATTGAAT TATCTTCTCT TCCACCTAGA TTGTCTCAA AGCATTGTGT TTTGCTGGAC
TTTCCACTCT TGACCATAAG ATGGTAGCAT TCCCTAAGGA TATTGCAGCA CAGTCTAATT CCACTGGTGT TCATCTACAG
TTAAATCGCA AATAAAAAAT AATAATAAGC AGCAACTGAT TGCTCAAGTT G

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CCTAGATTGA GTTATCTATC AAGAATCATT CATTCCCTCT CAGCCCTTGC AACTGTTTCC NATGACTTTG GACTTGGCCA
TGCAACTTGC TTTGGCCAAT ACAATGTGAG TTAA

SEQ ID NO:1434: (Length of Sequence = 249 Nucleotides)

GCTCCATAGG TCTAAGTTTG ANCTTTTCTA GAAAAGGATT TGCAGGACGA TCTGACGAAT CTTGGGCTTC CAAATTAGTT
CCAACAGTTC TAGTATTTTT TTTTTTTTTT TTTTGACAGA AGCAAATAAG TAAGTTTINAC TTTGTGATTA AAACAAAAGT
GAAATGCATT TAGTCCCAGG AAATGNCAT CTTTCTGCA TCINACTTTT TTTTGTGTG ACCTCGAGNT TCTCTGTCC
TCTTCAGTT

SEQ ID NO:1435: (Length of Sequence = 201 Nucleotides)

GAATGGGGCC AATGGCACTC ACTGINTCIT CAGGCCCCCA CGGACGGCAT GCGTGGGGAA GCCTAGTCTA CTTACCATCA
GCACGTTGAT CTNTACACA GCATGGAGCC ATAGTTTACA AAGGACCAG GCAGGTCAAG GACAGGCCAC TAAACTTTTT
GGTGCTGGG ACATNACCCA CCTCACCAN CATCAAAGAC A

SEQ ID NO:1436: (Length of Sequence = 312 Nucleotides)

GGGAAAGGTA TATTAACCTT CTGCATCAAA GATGTAACAG TCATGGGGTC TTGGTGGCCA TCTGGTCTGA GTTAGGTACA
GGACAAGAAA GAGTCAATTA ATCTATAATA AAGATCAATG ATTGAAAGAA GGGAGATCTG GTCTCTGTCT CTCTAGTCA
TTTACAGAAC AAGAGCAATG AGGAAGACCG TTATGCTATA ATCTAAGNAA CAGAATTGGA AATATGCTAC TGACTCAGTC
TCCAGGGGCT TAACTTCCCC CTTGGCATAA TAAATTTAAG GAGTCCTAAA ATTTTATTTT CCCTTACATT GG

SEQ ID NO:1437: (Length of Sequence = 294 Nucleotides)

ATTCCAATGG TAATACTAAC GAATTGTGCT ATCTAAATAT TGGATAGTAA AAACGTCAAC ATTTAGAAAA TGTATATCAC
ACAGGGAACC AATATTTTNC AAATTATCCA CATCTAATAT TAGGCAACCA CGCGCAANAA AAGACAGTT CAAAGTACAG
GAGAAATGGA TGGATTTTAA TGTGAGATAG TACAAGANGT TTATTGATAT AGTTTCAAGA TTCCATATIG TAATAAACCT
TTAANGAAC TTTCACTTCT TGAGTTTGG GTATAGGAAT CCAAAAAAAA AAAA

SEQ ID NO:1438: (Length of Sequence = 311 Nucleotides)

GGCCCTTTGA CTTTGTGAAT GAGCACAATG AAATGCCGCC TACTGATGCT TCTNATGATC AGAACTCTTT TTTAATAAAA
TAAATAACAT AAATCGTTGA ACATAATGTT CCNGTTGAAT GCAAANCAAA AAAAATATGG NAAACATTTT GNTAAAATTT
TTTCNGNTA AAACCATGAA CANTGGCTAT GATGAAGGTT ATTACATATG GAAAAAAAC TCACACAAGC ATATTTGNAT
TTGGCTTGAA GGGAACCCAT CATTAAATGC AANGCTAGGG ATCTTTTNG AAGCAGTTGA TCCTCAGGTT T

SEQ ID NO:1439: (Length of Sequence = 265 Nucleotides)

CGTGACACAG TTGAAGGAGT CGCTTAAAGA AGTCCAGCTG GAGAGAGATC AATATGCTGA ACAAATAAAA GGAGAGAGGG
CCAGTGGCA GCAGAGGATG AGGAAAATNT CGCAGGAGGT TTGCACATTG AAGGAGGAGA AGAAGCATGA TACGCATCGG
GTAGAGGAGC TNGAGAGGAG CTNTCCAGA CTCAAAAACC AGATGGCINA GCCACTGCCC CGGATGCCC CAGCAGTNTC
CTCTGAGGTG GAGCTNCAAG ACCTT

SEQ ID NO:1440: (Length of Sequence = 241 Nucleotides)

GTFTTACTCT TGTGAAGATA GCACTTTAAT CCTAAATGAG CATGTAACTG GTGACAGATC CTATATCAGT TTTAATAATT
GAAGCAGATA GTAATACTA GATTATTGAC ATTTTNGNT CATGTGTTCA GCTATTGCTT CAAACTTGCT CAAATTATAC

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TAGTGGCATA TGGACCGGAA AGGGTTAATT TAAAGGGGGG GAACCTCAAA AGTTTTTTTA AAAAAGAAAC TTGTCTGCCA
CAGTATGTTA CCAGTGTATA CCCTTCTGCC AGTTAGCAAA CTTTTCCTTT AAGCCTTTTT CCTCTAGGAT ACTCCCCATG
TTTCGGTAAT CTTGGGCATA CATTITTTAA GNATGGACCT CTTTGCCTTG TTTTGTITTC ATGCTGCTGT ATGTCCAAGT
ATTGTTAATT TCATAATAAG ACAAGAGTTG CTTTCTTTTT TAATTCCTTT TTCCC

SEQ ID NO:1427: (Length of Sequence = 207 Nucleotides)

TCAGGAATGA TAGTATCTGG GATGAACCTC TCTTAATAA GATTCAGGCC AGINTTGGTG GGTGTNTGCG GATGATTGTT
ACTGGNGCAG CCCAGCATC ACCAACAGTT CTGGGAATTT CTCGGGCAG CTCTAGGGTG CCAGGTTTAT GAAAGGTTAT
GGCCAAACTG AGTGCCACAG CTGGATGTAA CCTTNCACCA CTCCTGG

SEQ ID NO:1428: (Length of Sequence = 223 Nucleotides)

TAACATTCTC TCCAACCTCC CCAGGTCCCA TCAGTGTGA GAAGGAATCT AGGCCAGCTC CTGGGAGATG CCAGTTAAGC
CGCTTTGAAT CCTGTGCCCT TCCAATGNC CCTTATAGCA GTCGATGTCA GGGATTGGGA CAACITTCAA AACAAAGTCCA
TCAAAGTCCC CATGGGCACT AGGGGCTCTG GGAACCCAGT GTCGAGAGGC TTAGAGNCAT TGC

SEQ ID NO:1429: (Length of Sequence = 222 Nucleotides)

AAAACCAAGG AGCAAAGGGG AGACAGAGAG AAAAGTGGGA TGGATTCAAA GACATTGCAA CATAGAACTN ACOGAACTGG
CTTGINTGAG GTAAGGGNGG CAGGATGACT CACAGGTTTC TGGGATTATG TGCAACAGGT GGAAGGTGAT GCCATTAGCC
AGAATAAGGC TGTAGGCTNA AGGGGAGTNA AACTGGTTCT GGGGGTATAA CATTGATAGG CC

SEQ ID NO:1430: (Length of Sequence = 246 Nucleotides)

CAAAATTTCC TGTATCCTTT CATGGGTTTN CTTTGTITG TTTTGGTAAG AACATTAAAC ATGAGATGTA TCTTINAGTT
GTGTGTGTGG TTGANCTTT TTAGATACAT AGTCTCACTC TGTTACCCAG GACTGGAGTG CCAGTGGACA TGATCCACAG
CTCTCTGACA GGCTTCAAC TCCTGGGACC CAAATGAATC CCTCCACCT NCAGCCCTCC CAAGTAGGCT AGGGACTACA
GATGTG

SEQ ID NO:1431: (Length of Sequence = 364 Nucleotides)

CTTNCCTC GATGATGCTT CTATAATTTT GCCCTTTAAC AGAACTTTC AAAAGGGAAG AGTTTTGTG AATGGGGGAG
AGGGTGAAG AGGTCAGGCC CCACTCCTTC CTGCATTGTT TACAGTCATT GGAATAAGG CATGGCTCAA ATCGGCCACA
GGGNCGGTGA CTTGTGCCC CAGGGTTTG CCCCCAAGTG CCTCCATTTA AAAGCATTAA GGCCGGTACG GCATCTTCAA
AACAGAGGCG TGGCATTGGA GGAAACCTT GCTGCTTTAG TCCGATAGG GTATTTGAAC CCCGNTATA TTTTAAGGCA
TTTTAAATTC TCTTCCCCC ATTTTATGA CTTGAACAA TTA

SEQ ID NO:1432: (Length of Sequence = 208 Nucleotides)

GTGAGTAAAC ATGGATGGAA ACAAATTATT AGGTGTINCA AAGTGAAAA CACCAAAAT AAGATTTAA AAGAATGTCA
GGTATCCATA GAAAAATATT AATAGGTCTA ATACATATGT AAAANTTGGC GTCCAGGGG GNAGAGACTG NAAAGTTATA
TTTINATGG CTGAAATCCC CCCAANTTTA ACATAAAGCA CAACATTT

SEQ ID NO:1433: (Length of Sequence = 274 Nucleotides)

GGAAGGTTTT TAATGCATGA AGTATACTTG TGATCCTGGA GGTGGGAAA GATTCAGTAA AGATAAAGTT TGGCAAAAT
GATTCTNTCC CTAGGATTTG GGGATATGTA AATCAAACCA AAGGCACATT CTGCAGCTCA CAGCAACCTT CATTTTTTGT

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AGAGATTATG TCTTGAATCT ATCCTGACTT CAGCAAAAGA CAAAAGAACG TTGAAAACAT CCTATTTCCTA AATCGTTTAC
AGGAAGTTAC CTAAGGAGNC TGACAGATTG AACGGCTGCT ACC

SEQ ID NO:1420: (Length of Sequence = 326 Nucleotides)

GAAGATTTC TAGAAGCAAA TAGTGCCACC ATCCGTCATG AGGNTCTGTT TCTATAACGC TTGINTGTCT TINAGACTAC
GTAGGTGGTA GCTTATGAGT AGTAATGINC TTTTGTAGT AAATGTCACC AAATAAGCAA ATAAGAGAAA CATGAAGGCC
AAAACTGTN TTAATATCA GGAGAAAATG GACGGTTTAG CAACAATACA ATGTAGACTT CAAAATATGA AAAATCAAGG
AAATTNCTGT CATTGTCTTT AAGGGCTCC AGAGAAGTAT TAATTTGTCC TTTATGTGAA TTTAATGAGA TCATGTGAAA
TGTATG

SEQ ID NO:1421: (Length of Sequence = 294 Nucleotides)

ACCCAGTACA GGTACTCTCA CAGGAGGCAC TCAGCAGGGA TGTAAGTACA GCAGGTAAGA NTCCACCTCT NTCCCTGCCT
GCNCCTGGGA TCCAGTATG GCCCATGTAT CINCOCCTATT TCCTCAGGCT TCCTGGACTT TINTTGGAGG GAAAGAGGAA
CAGAAAGAGG AGCAGGCAGG AGAAGCAAGA GCTCCCGGGG GCTATGAAAG GTAACATACC TGGAGAGTTT NGGGAGACGG
CGGCTTGTTA GAGACAAGGG GAAGAGACAG AACAGGAGT ATTCTAAGAA GCAT

SEQ ID NO:1422: (Length of Sequence = 306 Nucleotides)

GAAGGGCATA TTTAATAGCT GCTGCAACA TATGGAATAG TGCTTTAATC AGTGGTGAAC AAGAAATTGC CTGTTGTGG
TTATAAAAC AAGGGACATT AATGINTCTG TTCTGTACC ATAGTAATGT GNAAAAAAA ATAGTGGTTG NAATGGTGT
TAATTTGTAC AGTTTGTGTC AAAGTAGAAT GGNCAGATA TTTTGGTGA TAGGCTTTTG TCTTAGTTAT AAAAATTAGG
NCATTTGGTA TGATAAAGG NGAGAATCTT AACAATTGGG CACTGGCCCA GAAAATTNCA GGGTGC

SEQ ID NO:1423: (Length of Sequence = 274 Nucleotides)

TGTGTGTGTG TGTGTGTGTG TGTGTGAGAA ATGGGGAAAG ACTGGTCTAG ATAATATTTC AGGTACCTTC CAACACTAAA
ATGGTATGAT TCCAGCTTA CAAAAGCAA ACTATTTTAA TATTCACCAC TCAATATAGT GTATCAAGCT CTCGGTTTAT
GTTTAAGGGC TTAGGGNACA GCAGCAACTA TTCGTGGGCA ATTAATNCAA AAACATCATG TACCAAAAAG GCATGTTTAG
GNCCTGCAGG ATAGTGAAAA AGCAAGAACA GTCT

SEQ ID NO:1424: (Length of Sequence = 297 Nucleotides)

GGAGGATTAC TTGAGCCAG AAAAAAAAAA AAGCCTCAGG GGTTCGGTG AATGTTGTGT GGACTTCCTG GAGAACAGAC
GTTTATGTG AACTGANTTC AAGGCTGATA CAGCCAGAA CCAGGNACAA GGTGAGAAAC TGCTCGTTTC CGGGAGGCAG
GACTTCCTAA CCGGGAGGCA CTGCAGTACA CTTTCTGAAA CAGGTTTGA GGATAGGGAA ATTCTGNC A GCGGGGGG
ATCCACTTAG TTTCTTAGNA GCGGCCGCCA CCGGGTGA AGGCTCCAGC TTTTGT

SEQ ID NO:1425: (Length of Sequence = 276 Nucleotides)

ATTTTTTCAA GGATGGAAAG GTGAGAGAA AATAAATAA AACATCTTTC AATAGTCTTT CTGGTAAAA GCAGCGTCTC
TNTGGGCTGG GGAGTAAAGG GTGTGGGCA AGGGGAGTGG GGAGAGGCTG TAAACCTTCC CCCAAACCCC AGTTTTAGAT
CCTTTGGTTT CCTTCTCCCA GAAGATGNC AGAAGGGCAT NGTGGGNAAC AGCAGGGNGG AAAATATGGT GATGACAAAC
CCCAGATGAT CAAGGGGCTG ATGCTCCTGG GCGCCA

SEQ ID NO:1426: (Length of Sequence = 295 Nucleotides)

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ATAGACCCCT AACATGCATC ATGTATGCTA TATTCCAGGA AAGAGACCTC CTAAAGACAT TCAGAATCTC ATCTGACACA
TTTATAACCT ACATGATGAC TTTAGAAGGC CATTACCAAT CTGACGTGGC ATATCACAAC AGCCTGCACG CTGCTNATGT
AGNCCAGTCG ACCCATGTTT TCCTTTCTAC ANCAGCATTG GACGGTG

SEQ ID NO:1414: (Length of Sequence = 360 Nucleotides)

GTATACAGCG TGGTCCAGCC ACCCGACAGC GAGATGGGCA TTTTAAGAAA CGCTCTCGGC CAGATCTCCG AACCAGAGCC
AGAAGGAATC TTTACAAAAA ACAGGAGTCA GAACAAGCAG GGGTTGCTAA GGATGCAAAA TCTGTGGCCT CAGATGTTCC
CCTCTACAAG GATGGGGAGG CTAAGACTGA CCCAGCAGGG CTGAGCAGTC CCCATCTNCC AGGNACATCC TCTGCAGCAC
CCGACCTGGA GGGTCCCGAA TTTCCAGTTG AGTCTNITGGC TTCTCGGATC CAGGCTNAGC CAGACAACTT GGGACGTGCC
TCTGCATCTT CAGACAGAAT TNCTAGCCTG CCTNAGGAAA

SEQ ID NO:1415: (Length of Sequence = 314 Nucleotides)

CTCAACACA GCATTTGAAG TCTTAATATT TTAGTACATA CTATACTATC TCINCTTACA ATTGTTTTTT GTTAAAGAAA
CCATGTTTTT NATTTCAAAG AGTTTCCTTT ACTGTGGATT TTAGTGATTG CATCTTTGTT GATGGGTTAA GATTGTCCNN
TATATGATCAT TAGTNCCTTC AATGTGCTGT ATTCACTGCT GCCTCTGGGC TCCTAAACTG TGGAGGGCTG TTTGTCCCTA
TATTAATGG GGACAGATTG TCCTGCTTTT TAATTTTCAA TGCTGACTT TTACCCNCTA ACTTTTCCGT AGAT

SEQ ID NO:1416: (Length of Sequence = 370 Nucleotides)

TTCCATTTTT GCTCCTTCTC AGGATAATAG CAGACCGGTG ATCACAACCT TAGTTTTGAT GAGATAACCT CCTATCTCT
TAAAAATGGT CTCTATTATT TTCCAAGAGA AGACCAGTAA AACTAAACA CCTGCCCTGA TCTCAGTGTC TTAGATGTTT
TCCTGTCTCT CCTTATCTCT AGCAAACCTCC CCAGGTGCT ATTCTTATTC CCATTTTATA GATGGGCAAC TGGGTAAAG
AGGTAAGCTT GGTGAGGTCA CTGAGATAGT GGGGAAAGGA GCTTGGTTCA CATCAGGTAT GCATTCCCCC AAGGTTCCAC
TGGGGCATCT GAAGGAAGGG GTTCTCTGAA GTGCAAAATA TAGGGTACTG

SEQ ID NO:1417: (Length of Sequence = 365 Nucleotides)

GACTCCTTCG CCAAGGGAGC CATCAGCACC AGTTGTTCCT GAGCAGCCAC AACACCAGTG ACCTCCCTTC TGCTTCCGGC
CAATCCCGAC AGAGCCTCTT CCGAGTCTT GAGCTCCTGG ATAGCTGCCT CAATAAAGCA GGACTCGGGA GTGTGCTTCT
CCTCTGCCAG CTGCTGCTCT AGTGCTACTT TCTCCTCAG AACTACCCGG TGCAGCACCT GCTCCTTAGA GGCCAGCAGC
AACTTGGAGT ACTGGCTGTG CTGTTCATCT CTTAGATGAA TGGGATGGTC TACATTCATC CATTTGGGAT TTTGGGCAAA
AGCCACCAAC AACCCCTTTT TTTCCCTCTT CAATCAAGCT GCAAT

SEQ ID NO:1418: (Length of Sequence = 354 Nucleotides)

CCAAATCCTT AAGTTTACAA AGCTGTGGA AAACCTTTGTG TCCTGATTTC AACAATCAGC CTTTGTTTGA AAGATGAGCC
AAGCTCACAG AACTAAATTT TTATGTCATG CCATAAGCTG GAGAGGAGCC ATTTGGCTAC AGCTGCGGAA CTTTATTGAG
GAGCAAATGA AAGGCACATG GACGAGCAGC CTGGTGCACT TCATGTTCTT CCTGCCCTGTG AATTGAATAC TGTCTGGTGA
GCAGTTTGG GTGGGTCAGG AGCTCAAGGC TGGTTTGTGT GGCTGACTAC GGATGAGCAC TGAAGTTGCC TCAAGAATT
AAGGGGTGTC CACANCAGCC TCTTGGGGTC TTTT

SEQ ID NO:1419: (Length of Sequence = 363 Nucleotides)

GTGGAAAACG TGGAAATGAT GTGGCCACTG AAAGAAATTC AAGACAACCTG AAACAACCTG AGATTTCCAT TTTTCACTCG
TGTTTCTTA TGAACAATAA CATTGCAGAA GGGGAAATAT CAGAAAGTTG ATTGATTTTT AACCCAAAAA TAGAACTTTT
TGTAAGCTAG GAAAGCATCT AAAATTAACA AGAATACAAA AATGCACTTT TGTTTACATT TGCTCTATTT AGATCTTACA

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GCAAGGCGNG AACCNATGAA TGGACTCCTT GTGTGAATTA TTGCATCTTC TTCCAAAGCA GGTTCATCAA GACTTTCACA
GAGATTCAAT TTINTTGAGA AGTAAGGGTT AATAGGAGGA TAGAATTGG TTCCNAATCT AGTNTAAAA GTGTCCAAGC
AAATCAAAAA GTAAGATATT TTAGGGGCCA TACCCACATC TT

SEQ ID NO:1408: (Length of Sequence = 388 Nucleotides)

CCCCGCAGCA CCACGAGCTG ACCTGCTCT TCGAGTGTCC GGTCGTCTT GACTATGTCC TGCTCCTAT TCTGCAGTGC
CAGGCGGGC ACCTGGTGTG TAACCAATGC CGCCAGAAGT TGAGCTGCTG CCGACGTGC AGGGGCGCCC TGACGCCAG
CATCAGGAAC CTGGCTATGG AGAAGGTGGC CTGGGCAGTC CTGTTTCCCT GTAAGTATGC CACCACGGGC TGTTCCTGA
CCCTGCACCA TACGGAGAAA CCAGAACATG AAGACATATG TNAATACCGT CCCTACTCCT GNCCATGTCC TGGTGTCTTC
CTGCAAGTGG CAGGGGTCCC TGGGAAGCTT TGATTGTCCC ATNTNAATGG AACGGCCAC AAAGAGCA

SEQ ID NO:1409: (Length of Sequence = 348 Nucleotides)

CAATGAAGTC CTTAAGCTTT GTTAATATGA GAATGTCTTT ATCTCTTCTT TATTTCCAAA GGACAGCTTT GCTGGTTAAA
ATATTCTGG TTAAGTTTTG TTTTATGATC TTAGCATATA TCATTCCACT CTCTCCTGGC CTGTAAAGCC TCTGCTGAAA
GATCCACTTC TAGCCTTATT GAAACTCCCT TCTATGTTAT TCGNTCTCNC CTCTTGCTGC TTCCAACATC CTGCTTTGT
CCATAATTTG TAACAGATTG AATATAATAT GAATTAGNCC TCTTTAGACT GAATCTCATT GGAGNCTTTT CACCTTCTT
GTTTTGGGT ATTATNTCT TTTCACAG

SEQ ID NO:1410: (Length of Sequence = 370 Nucleotides)

GACTATTIAT TCTGCCTTAA ATCAATGGCA AATAAGTCAA GATGACATTT TGTGAATGTA GACTATGGAT AACTCCTAA
TAGATTGATG TAGTCATAAA AGGGGGTCAA GTAGATGTT TNCGTATG TAAGCAATAA TTTCCCGTG TCTTATGAG
TATGGCTAGC GATTATTTAT TACATGCTAG ATGGGTTCTT TGCAATGTTG TTCCATATAG GTGCAGAAAT TTCCTCAGCC
ACTGGAGGGA TTTGACCAT ATTTGTCAAT TGGATGAGCT GTTATTAGAT TGAAATCTAC ACATCATTTT ATTAAAAATT
GTGCCCTAGA AAACGCAAAG CINTTGCACA ATGGCGATTA AAATTATGGG

SEQ ID NO:1411: (Length of Sequence = 385 Nucleotides)

GTCTCAAACCT CCTGACCTCA GCGATCCAC CCACCTCAGC GTCCCAAAGT GCTGGGATTA TAGGCGTGAG CACCGCACCT
GGCCTATGAG TGGTCTTTTA ATTAGGAAAT TTACATTTT ACATTAGTGA GATTGGTCTT TTGGGCTATT GTACTTTTTT
TTTTTTTTT TTGAGATGGA GTCTTGCTCT CTCACCAGG CTGGAGTGCA GTAGTGCAAT CTGGGCCAC TGCAACCTCT
GCCTCCTGGG CTGAGTGAT TCTCTGCCIC AGCCTTCCAA GTAGCTGGGA CTACAGGCAT NTGCCACGC ACCTGGGGTA
ATTTTNGTGG TTTTATGATG AGAATGGGGG TTTTGCTAAT GTTTGGCCAG GCTTGGGCTT GAAAT

SEQ ID NO:1412: (Length of Sequence = 337 Nucleotides)

CCATTGAGAT TCCTCCTGGG CCTCCTGCC CCATTGCGA CAGATTGCT ACCTGCTCCA GCTCAGGAC CCTCCCTCT
ATGATGAAGT GCATTGAAGA GAACAATGGT GTGGACAAGA GGATCAGCAG GTTATTCTC CCATCGGGG CCACCGTGAA
CATGGACGGA GCAGCCATCT TCCAGTGTGT GGCGCGGGT TTCAATGCGC AACTCAACAA CGTAGAGCTC AACGCAGGAC
AGATTTTCAC CATTCATAGT ACTGCCACAG CGTCCAGTGT TGGAGCAGCA GGCGTNCAN CTNGAGGGGT CCTCANCATT
GCCATTATCC TGGGAGG

SEQ ID NO:1413: (Length of Sequence = 367 Nucleotides)

ATAAGTGGAG TGAAGAAATT AATGCATAGT TCAAGCCTAA ACAATACAAG CATCTCAGC TTTGGAGTCA AACTGAAAA
TGAAGATCAC CTGGCCAAGG AGCTGGAAGA CCTGAACAAA TGGGGTCTTA ACATCTTTAA TGTGGCTGGA TATTCTCACA

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GGACATGGAA GATGCTCCTT AAAAATCTCT GTAACCATTT CTTTATGTA CATTTGAAAA TGCCCNITGG NTACTTGGAA
CTGTCAAAT ATTTTATTTT TTACATAAGG TCACTTAAAT GTAAAGCGGT TAAAAGACAT CTTTCTNGC ATTGCCATCT
TAATATC AGATATTACG GGATGTTAG

SEQ ID NO:1402: (Length of Sequence = 338 Nucleotides)

GTAATTGCTA TTTGATGTA TTTAAGAAA TTAACCCCTA AAACCTTAAAT TCCTTAAAC AATCTCAAAC AGAAGAAGCA
AAAGCTTGIN CTGTGCTCCA GGAAATAAGA TTCAGCACCA ATGAAAATAA ATTATAGAAA ATCAGAAGAT GGGTCAATAT
GAGTGGAAAA AACCTAACAT TTTAATTGTT TTINCTCTCA ATAATTGTTG TGAACCATCC AAAAAAGTAT GATACAAAAA
TAGCACTATA CTAAGAGCCA GATGACATGT CCTTAAAGCC TTAGCTCTGC AAATTATTGG TTGTGTAACA CTAGGGNACA
ACACTTAGNC TCTCTAG

SEQ ID NO:1403: (Length of Sequence = 381 Nucleotides)

GGAGTCTCAG TTTGTGCCC AGGCTAGAGT GCGANGGCGT GATCTTNGCT CACCACAACC TCATCTCCT GGGTTCAAGC
GATTCTCTG CCTCAGCCTC CTGAGCAGGT GGGGTTACAG GTGCCGCCA CCGCACCAG CCAACTTINT GTTCTCAGCA
GAGACGGGC TTGCCCATGT TGGTCAGGT GGTCTCGAAC TGACCTCAAG TGATTTGCCC ACCTTGSCCA CCCAAAGTGC
TGGGATTATA GCGGTAGCA CTTCACCTG GCCTCTAAGC TTAATCATTT CTAGGCTTTT NATTTAAAGT GAGAAACATG
TGACTCTTTC CTTTCATTG GGACACTTTA AAAGGGGTTA TTAAATTGAC CCTAATTACA A

SEQ ID NO:1404: (Length of Sequence = 325 Nucleotides)

AGTCATCAG CTATCATTG TGTTAGTGA TTINATGTAT GGCCCAAGAC AATCTINCTT TTCCAGTGT GGGCCAGGGA
AGCCAAAAGA TTGATACCC CTGACAGGAT TCCAGGATTC TTTGTAAAT NCTCAGAGGC CCTCTGTGCA TACTCOGTAA
GGACTATCCA CATCTTTAT TACTTTCAIT GGCAATAGGT ATAAATTTT ATTTGTGGN TATTTTACTG NAATGTTACT
TGTTTTGCT TATTTACTGA TTGGGTGGA GGAAGTCAA GGATGAATA ATCTAACNT TTTTAAAAG GAAAGGCTAA
AAATA

SEQ ID NO:1405: (Length of Sequence = 349 Nucleotides)

GGATTATGAC TGAACGCTCT CAGCATGTTG GCCTTCACCC CTGGCGGTGG CTGGAACACA AAGATGCGC CCGCACGGAG
CAGATTCACA GGCACCTTGG GGTGATCTC CATGGTTAGG AAGAGTCGA AGCAGGCATG CGGCTGCAGG GAATGCAACT
TCTCTCCAG CTGCATCAGC CACCTGGGG CCAGATGCAC ATCTTCAGC ATCACCACC TGCCCGANT TACAAGCGGT
GTTTTATTGC CTATCTGCT TNGITAAAGC CTCTTCAGA GCGGATTGCA ATTGAAGGGA TCTTCGGGT TCTNCTCGGC
TNCAAAGGTC CTGACAATG TTCCCTTG

SEQ ID NO:1406: (Length of Sequence = 392 Nucleotides)

GGACTGCCCG TTTGTTTATG AGACAGGGTC TCATTCTGTC ACTCAGGCTG GAGTGCAGTG TCATGATCAT GGCTCACTGC
AGCTCGACC TCTCAGGCTC AAGTGATCCT TGCATCTCAA CTCACGAGT AGCTACGACT ACAGGTATGC CCCACTATGC
CTGATAATT GTNCCTTTT TTTTGTGGT AGAAACAGG TCTCATCTG TTGCCAGGC TAGTCTCAA CTGCTGGACT
CAAGTGATCC TTCCAACCTG GCCTCCCAA GTGCTGGGAT TACAGATGTG AGTCACAATG NCCAGCATGG ATTGTCTTT
TCAGACCCAG ACCAAAGAAC AGGACTTATT TGCCCAAGA CCAATCTAGG NAAAGTATAA GCTGTGTGT CA

SEQ ID NO:1407: (Length of Sequence = 362 Nucleotides)

GTTAATTGGG NTTCAACAAG AATAATTTCT CCACAACAAA AACCACAAT TGAAGNGAGT TGAAAAGNGN TCAATAGTGG
AAACAGTCG CTCAGTACTT TTNCCTTCTG GNTTCATCT CTAGAAATTT NAAGTGTIN AGNCAGAGTC CACCTTTGT

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SEQ ID NO:1395: (Length of Sequence = 323 Nucleotides)

CTTTTITTA GATTTCAAAC TGGGTACAC ACTGGAAAAG GCTGGGTAA GGGCCGAAAT TTAATAAATC TGTACTGATA
 ACTAAGGCT ACAGAGATTT CATATATTTT TTTTAACTTT TAGAAATCAG AGTGCTTATA AAATGGCTGG CTCATGGCTC
 TGTCACCAG CATCTGTAC GCGCCTCCT AGCCTTGGT GGTGAGATAA CCGGNATAG TGATTCCATG CGTAAACAAC
 AAGAATACTA AACCAATAAA ACTAGCTTAT CATGCAATA TTANGGCATC TAGAAAGTCA GTTAAATAA TATGTGATA
 GAG

SEQ ID NO:1396: (Length of Sequence = 384 Nucleotides)

TGCCCTCCGG GTTCATGCGA TTCTNCCGCC TCAGTCTCTT GAGTAGCTGG GATTACAGGC ATGCACCACC ATGCCTAATT
 TTTGTACTGA TGCCAGCACT TTCTTAGCAA CCCAGCTGG TGTCTAGTA TGCCCCCTCC AGTCCACTGT CTCGCGGCC
 AGTTCAGCG TAGGACTTGC TTAAGAGTTT CAGTCTTGT AGCCTATACT GCCTTTNACG TTTATTTAGA GATCTAGAGC
 ACTTTAACC TCAGTGGCAA GGTGTGGG AACTTGAGTT CGGACCACTG GGATTGGCAA ATTCCCCTCT GGGCTAGGGT
 TGCTTTAAAT GCTCCCTCA CGTGTGGCA ATCAGCTGAG TTTGGTCCAG TTTTCTTTC TGCT

SEQ ID NO:1397: (Length of Sequence = 370 Nucleotides)

TTGAGTTTNT TCAGTGGCAT CCCCTGCTCC CTTGAGCACA CACAGTGT TTCTATTTATG ACTGTAGTGC CAAGCAGAAT
 TTCCATGTNC TTGCTAGCTG CCCATTCTCA CCCCTCAGGG TCTCATACTT CTCCCCTGAA GCCTCCCAAG CAGTCAATGT
 GACAGGGACC AAGTATGTAC AAGGCAACAT ATTGGGTTCA AGTGCAAACT AAGGGAACCA GGGCTGT TTCTAGTTTG
 GAAGTTTTTC TTTATCTTAA GAAAGAGAC AGACCAAAAC CAAGAAGATC AACAAATRACT CTCTCTTTG TCATCAAGGT
 GATGACATCA AGGTACTGAT ATTAACCAGA AGTTACAACA AGAAGGAATT

SEQ ID NO:1398: (Length of Sequence = 307 Nucleotides)

ATCAGCATTA GGTITTCACC AAAGTGATAC AAGTCTGAAG GTCTTCATCA GCAGTCTCCC TCATAGTCAG CGCCATACCG
 AAGAGGCTG TCCCTCTCAT AGGGCCTCC AGCCACTNCT TCCCACAGG CCGTATCTN CTGTGGCTGG GAGTGTGGAC
 TGATTGTGTA TGATGTGAGA GATCCNNGG GGTGTGAGCT ACCGCACCTG GCTGAACCTT CAAGGAGAAG TTTGTGCATC
 ANTTTTCAAA AAATTATGAT ATCAAAGAT AGCTGTGCC TACATTTGGG AAAGATACAA AAACCTG

SEQ ID NO:1399: (Length of Sequence = 380 Nucleotides)

CTGAATTATT GAGGATGAAT TGATAAGAC AGGTGTAAT AACTGAGGCC GGGCATTAGA CTGAGCAGCT GACTGTCCCT
 CAGAAACCAT AACCTTGCTA CCCGATTGG GCACTGTGAC AACTGTGAC ATCAATGCAG ACTGCAAGIN AGTTGGCAAA
 GCTGCTGATG TGTAGCTGA AGTTGTGATG GGATTGGAAG TGACAAATAC AGTTATTGTA TTTGGGGCA AGGGAGTGA
 AATGGAGGAA GAGCTAACAG GTCTTGACAT TACTGGAGGG ATGCTTGGTG CAAGTTAGA ACTGACCTCA CTCATTCGG
 GGATGCACAA GGGATGAACA CAGCTCATTT CCTGTNAGGT AAGTTAGGG AATTAGAAGG

SEQ ID NO:1400: (Length of Sequence = 232 Nucleotides)

ATTATAGATA CACACCACCA CACCGGCTC CTCACATTAA AGTGGGNTTA TGACCATGAA CACTTGGTAT TAATAAATGT
 CTCAGCACAC CCAAGCCTGA AAATCTGATC TAAACCTCCT TAACCTGAAT TCCATCCACA ATCCACAAC TNCCTGGNAA
 AAATNTNTCC CAGCTTCTCC TTCTCTAGC CCAAGAAACA GCCTTAACAG CGNGCGATT CATTCCTACA CT

SEQ ID NO:1401: (Length of Sequence = 349 Nucleotides)

AAGCTAAATT TATAATGAAC AGATTGAAGA AAAATAAAGA GCTACAGAAA GTTCAGGATA TCAAAGAAGT CAAGCAAAAC
 ATCCATCTTA TCCGAGCCCC TCTTGACGGC AAAGGGAAC AGTTGAAGA GAAATGGTA CAGCAGTTAC AAGAGGATGT

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GCTAGTATC TCTCAGACAC TTGGTCGGTA GAAAAGATCC CGCACCATCC TCCAGGNTCC AATGGCCTTG GAGAGAGGGG
TGCAGGGCCC ACGGNCATTG CTGACTCTTT AGAACGTGCT GACATGGAGC CAGACCACTC GGCCCTGAGT GCGGCGAGGA
CCCTNTTINT GGATGTGGAG GAGCGCGGCG CGGAGCATTG T

SEQ ID NO:1389: (Length of Sequence = 399 Nucleotides)

GGTGCCCTGT TATCTGGTAA AAGAGCCACT TATGACCTCA GGTGCTACTT AACCTGGGGG GCAATTGTTT CTTAGGCCTA
GCAGATGTTT GGGATGACAC TAAAACTCA GTGGTGAGAT GATTCCCTTA GCAAGATTGC TGAAGTTAGG TTTAGACGTG
GGAGGGTGGG TATGTGASCA ATGGTGCCAA TAGCGGCTCT TTATTGCTCT TGTCCTCATT ACTGCCATCA GGAAGGTGCT
ACTGGCCTCG AGCCAGGGTG TTCATAATCT GGCTTGGGT TAACCAGACA AATAGAACTT CTTTTCCTAG ACTGTTGGCT
TTNTGGAGGT TGGCAGCCTC TATCAGAGN TAAATTTCC CAAATCCATT TACCCAGTAT ATTCACTACA ATTTTTC

SEQ ID NO:1390: (Length of Sequence = 381 Nucleotides)

GGATTGAGGT GAAGATACAA CAAAGAAAGG AAATTGAACG GAATTATTAA GAGGGTCAAG TTGATAGGC AGATAAGACT
AGGTATCAGC AAGACATTTC AAACAAAAGG AACATTATGT AATTTTAA AAAAATACAT GAAAATAATA TTTAANCAAG
GAAGGAATAT GATAAAAGAN GGATAGTTAG TAAATTTGG ATAACATAAA GATTATTGAA TCTCCAGTCG TCAAATTTAT
CCTAAACTAC TGGGGAGAGG TCTCATGTCA GATTTTGATT ATCGAGAAAG AGGGGTCAAG AGTATAAGNG AAATTCCTTT
TTGTTTGAA CTTCAGTGT CCNCTATTG TGGGCAAATA TCAAATTCAA ACCAAATATA C

SEQ ID NO:1391: (Length of Sequence = 327 Nucleotides)

GAAGAAGTCC TTCTTAAGCA AGGCTTACAG ACTCCAGGG AGAACAAAT CTCTTTATCT CTCTGGGGTT TTAGGACCTT
CATCAAGTCA TAGAATTGAA ATAGAGAACA TCAATTGTC AACTTTTAA TTTAATAGT TTTGTAGTA CATAAAAATC
ATGTTATGAA TTATTTTGT GTTTAAATTA TAACTTTTT AGCATTITA CCATATCTT AAAAATTAAA AATTATGAGT
NCTGAGAAAG CAGTGAAATC ACATATAGGT ATTTGATTAA CTTTATGTG ATCTTTTACC TCAAGCTAAT GTTCTTAA
ATCAAGG

SEQ ID NO:1392: (Length of Sequence = 223 Nucleotides)

TTTTTAAATA TTTAAACAA TTTTATTCAT GAAATATGC TGTACAATGC ACTCTACACA GCCTCGACAC GGCACACAG
CACACGACA CTCTGACGC ACGGCCACG TACACTGCCT ACGATACCG CGGGGACGC CGGCCCCACC GCCCGTCCCG
GCCGGACACT TATAAATATG GGAGAAGGGC CAGAACNGC GCGGAGAAAG GGGCGTCGGG GTT

SEQ ID NO:1393: (Length of Sequence = 296 Nucleotides)

GAAAGTTAT TATTTCCCA TGINCTTTAC ATTTCATTT GGAAATATCA TTCTGACAG AAATAGNTAC ATTATACCTT
CGAAAGCAGA AAGATCTTAA TTAATTAAAA CAGTTTACAT TTACCTTAC ATTAGGTCG GCTGGCTAAT TTCAAAGGAT
TAAAAATTGC ACCNATTTGG GCCAACTGGG GTCTGAATA ATTATCCNG GTAAAAGTAT AATATTTTAT ACTTTATACA
TTTTGCTTCA TCACACATT ACITTCACA CAGTGNCAA CTTCACATT AAAAAG

SEQ ID NO:1394: (Length of Sequence = 281 Nucleotides)

ATCTTTGCAT CCTGGGACG ATTTCCAGT GAGCATGGTG AATAATCTTT TTGATAGGCT GTTGGATTG AGTTGCTAGT
ATTTTNTGG GCATTTTGC ATCTGNTTC ATCAGGGATA GTGGCTTCA GCCTTCTTT CGTGTGTGTG TGTCCCTGTC
TGTTCCTGT ATTTGGGTAA TATTGGCCTT GTAGAATGAA TTAGAAGAA TTCTTTCTT TTTGATTTT TTGAATAAT
TTAAGAAGAA TTAGTATTAG TTCINCTTA AATGTTTGGT A

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SEQ ID NO:1381: (Length of Sequence = 273 Nucleotides)

GCCACTACAC TCCAGCCTGG GACACAGAGC AAGACTCCCT CCCAAAAAA AAAAAAAA TTATTAGAAA GAGGAAGAGA
 GAGATGNCAG AGCCTTTTAC AGTTGGGTGT TGGGNGTTAG AGACCCAGTA CCCCAGCCTG ACATACCTAC AGAAGCAGTG
 AATTTACTTA TTTACTGTTA TGAATAAAT AGATGCTGCC AGCCGTGCAC AGCAGAACT ACTATTGANT CATATGGTTT
 TAGCCTTCAC CTTTAAATAT GTCTAATTAT ATG

SEQ ID NO:1382: (Length of Sequence = 296 Nucleotides)

CTCCACAGCT GCCACATAGA ACAAGCAAAT CTGACATCAC AGCTCTTTTA AAAATCTCCC AGAATTCTAC ACTGGAATAA
 AGATCACCCA GTAACTCAG CTATGTTGAT TCGTAGGAAT TTCTCTTGG AGTTAATAAT AATCATTAGA AAAAAATAC
 AGGAAGAAAT AACTTCCTCC TATTCTTATT GTGATAAAT GTAACATAG CAGACATTCG TATATAGATC CTATAAGCGA
 CAAGAGGGAA AATAGGATTT GCAANITAAG CATCTGGAAT AAATATTTTA GGAAAA

SEQ ID NO:1383: (Length of Sequence = 293 Nucleotides)

CCAAGGACCG GCGCGTGGG CTGCTCTGGG ACCGCTTCGT GCGGGCTGC CGCGCCGACT GGTACGGAGG CAATNACCGC
 TCGGTCACTT GCTCTGACCA CTTTNCCTCA GCTCTCTTC AGTCTCTTC GTTTATCCAG AAGAACCCTG CTTCTCTCCA
 GCGNCTGAGG CTGGTGGCAG GCGCGTGGC CACCTGCAN CNGGTGCCC CCCCAGCACC TAAGAGGGGA GAGGAGGGAG
 ACCAAGCAGG NCGCCTGGAC ACGAGAGGAG AGCTTCAGGC AGCCAGGNAT TCT

SEQ ID NO:1384: (Length of Sequence = 378 Nucleotides)

GGTGGTTTTG ACATGTAGAA AATAAGATGG AAGGCTGAAC TAGGGCAGTG GTGTTGGCAA ATAATCAGAT TTCAGGAATA
 TCACAAAGTG AGGNGCCAG GATTCATGAC CATTITNATG TAGGAATAAG GGAGGAGCCT AGGATGACTC CCCCAGTTT
 CTGGCTCGAG TAACCTGGAT ATCAACAAGT CATTTAGCAA AATAGAGAAA ATAGGAGAAG CAGCAATTG AGATAGAGAT
 AGAGGCAATA TAAAGNNTTA TATATGACC ATGGTAAATC ACCTAAATTC AGAAAGTGT AGAAACTTG GGTCTGGANC
 TCAGGAAAGA CACTGGATAT GTAGATTGG AAAGTTATCA ATCTCAAAGT GATTGCTT

SEQ ID NO:1385: (Length of Sequence = 204 Nucleotides)

TCATTCTTGG GTGTTCTCG CAGAGGAGGG NITTGGCAGG GTCATAGGAC AATAGTGGAG GGAAGGTCAG CAGACAAACA
 AGTGAACAAA GGTCTCTGGT TTTCTTAGGC AGAGGACCCC GAGGCCCTCC GCAGTGTTG TTTCCCTGGG TACTTNAGAT
 TAGGGAGTGG TGATGACTCT TAACGAGCAT GCTGCCCTCA AGCA

SEQ ID NO:1386: (Length of Sequence = 238 Nucleotides)

CCCCATCATG GGCAGCCAGA GCTCCAAGGC TCCCCGGGC GACGTGACCG CCGAGGAGGC AGCAGGOGCT TCCCCCGOGA
 AGGCCAACGG CATGGAGAAT GGCCACGTGA AAAGCAATGG AGACTTATCC CCAAGGGTG AAGGGGAGTC GCCCCCTGTN
 AACGGAACAN ATGAGGCAGC CGGGGCCACT GCGATGCCA TCGAGCCAGC ACCCCCTAGC CAGGGTGCTG AGGCCAAG

SEQ ID NO:1387: (Length of Sequence = 295 Nucleotides)

TTTTTTTTTT TTTTTTTTTT TTTTANITAG GCAAGAAGAG GTGTAGTAA TTGAGGAAAA ACTGACAGAT GCTTTTCTTA
 ATACCAAAT TGAGCTTACA ATTAGGAAT GAGTATGTGT AACAGGNTAC AGGTGACAGT GAAGATAGAA GAACCAAGNT
 GACCACAGAC TCAATGTGCT CTGTAACATC GCACAGTTA CCCAGCATGA CTTTCCTTAG GAGGCCCTCT CCTCACGCTA
 GAGTAAAGT CCCAGTTAAG TGAAGCCTAC CAGAAGAACT AGTAGAAGAA GCTTT

SEQ ID NO:1388: (Length of Sequence = 201 Nucleotides)

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AAAGGAAAAT ATAAAAGAAA ATAAAATCTC ACATTGGTGC TTAGCAGGAG AATTTTAA A GACTTACAAA TCAACAAGCT
 GTTCAAATAA ATAATGAATG CTGCAGCTGG CTCCTACATG GGGCTTINAG TGTCCCANIA GTAGCAGATG TCCCAGTCT
 ATAAAAT

SEQ ID NO:1375: (Length of Sequence = 338 Nucleotides)

TGCATGGAAA CTTAATCTAT TCAGGTCCCA ACTTTCAGGC TTCTCTGCTC TGACAAGTAC TAGAGGCCAA TATGATAGAC
 TAGTCTGAGT TGGATGCAAG TTAGCCATTT CCAGGAATGA TACCAGGATA AGTATAATGG TCGTGAATAT AACCGGATTT
 TAAGGGAGAA TGATTACACC TGGAAACAAA CTGTCAATAC ACAAGTAACT AGTTGTAA A GATTTCTAAT TTTGACCAAA
 GATTTTTACT TTCCTGGTAT AGAAATGGAA ATAAACATTN ACACTTTAGG TTTTGAAAGC AACCACTCC TAACACGGTT
 CTGAGTTGGG GGCCAACA

SEQ ID NO:1376: (Length of Sequence = 307 Nucleotides)

CAAGCCTCCC TCAAAAAAT CCCAGAGTA ATGAAAATAC AAAGTCTGCT TGTTCAAAAT TATGGTGC GA ATAAAAAGG
 AAAGGGAGGA AGTGATGGAG TAAAGTTCAG ATTAATAATA AACGGAAAGT CACAACAGTC GAAAGGTGGA AAAAAACCGC
 AAATGCCCAT GANCTGATGA ATGGATAAAC AAAATTGGT GTGTGTGTAT ATATGTGTAC AAACCTCCT TTTATGATGA
 AATAGTATTT CATGTGTGT GCACATGTN CACACACANT TTAATAGTA TTTCTCATA AAAAAAG

SEQ ID NO:1377: (Length of Sequence = 353 Nucleotides)

TGAATACAC TTGTGAATAC AGTGTAGG ATACATTAAC AGTTTCTGA GTGGGCTGCT CTTTTTCTT CAATACGTA
 TATATTTNN TTAAGCTCTT CTTTAAAGA TAAATATTT TCATACTTCT CTTAAATCCT CAAGGATTAA CTCTGAGTCA
 CCATTGTGG TATTTTAAAT CCTTTTAAAT AAATCTCTGT ATTTGCACT GCATCAAAAC AGTAAACAT TTCACAGGGT
 AGGATCTGAT GACCATTTTA TAATCAACAT TTTTAGGTAC CACAAGAG ACTTTATGAG CATCCACTGA AATTATGGGC
 ATTATGTCAT ATAAATATCC AAAAAATCCAT TTT

SEQ ID NO:1378: (Length of Sequence = 315 Nucleotides)

GATTTGGCAA ATATTGGGT GAGATTGAA AATAAATAC ACCACTG CACAAGTTAA TGTGAATCAA GCATCTGTTT
 ATTTCAITCA GTTTATGCCT TTTTCTTT TTTTGTGAG TGCAGTTGG GTACAGACT CTCAATTGA CAAGACACTT
 TAAAAGCAGG AGTAGAAAT AGGCTGGT TTTACAATA TTACAGGAAC TGTCAATAA AACTTCAAGT GGATCAGTTT
 ATTTCTGATT TAACTGGGG ATAAACAGTG TTCAATATTT TCCAAAAGAT TCTCCCATTA TAGAAGTCCC AAAAG

SEQ ID NO:1379: (Length of Sequence = 352 Nucleotides)

ACCGCAAAT TTAGCTGTTT ATTAGGTGC AAGTCTCTCC TTCTCTCCCT GCTTTCTCTT TCTNCTTTT CTCCCCACAA
 ATCTCTCAA AACACATACA AAAAGAGAAA ACTAGAAGCA AGATTGGGTC AAACATGAAG AACACAGAAA GCNTATTAAA
 TAGCTAGCTT TAAAGGGCTC TTTTTCAGTT TGAACAAAAG TAAACGTTT TCAAAAGCAA AAACAGAAAA CAGAGCTTCC
 ACCAGATTG TGCAACTTAA TGAGAGGAGG TTAGTGCTGA TAAACCCATT GTGAAATCTA TTATAAAGTG ACAGGTTTTT
 CAAGCAAGGA AATCCAATCC AGTTGGGGT TG

SEQ ID NO:1380: (Length of Sequence = 261 Nucleotides)

AAAAATTTAG TGAAGACGTG AATAGATATT NCTGCAAAGA AAACATACAA GTGGTCAATA GGTATATAAA AGGTATTCAA
 TATCACTAAT CATCAGGGAA ATGCAAATCA AAACCACAAT GAGTATCTN CTCATACCTT TNATGATGGC TAATATTAA
 CGAGAGATAA CAAGTGTTA TGGGGGTGTG GNGAAAAGAG AATGTTGAA CACTCTTGGT TGAAATATAA GTTGGTAGAA
 CCATTATGCA AAACAGTATG A

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CTGGGACAGA GACCTTTGCA TTGCTCCATG TGTGGCTTC AGCTGGGACA GAGACCTTTG CATTGCTCCA TGTGTTGGGG
 CAGGTCCTCC ATTTCAATCT CCTCTGCCCT AATTTAATAG CCATACCTGT GCTATTTAT ACCTTTAAAC CCTAATCCTT
 TTTCGTAAAT TGTGTTACAT TTTGCAGAGT GCCAGCATT TACAATGTGT CTTTATATG TCACAGAGGT CATCAATTAAG
 TTAGACCTTT GGCTTCATGT GTCTCCCGAG AGATGGTTTA TAAATTTGTC ATNCTTCTGG CACAGGTGGT GTGGCTTAGG
 GATTAGGACA CAGCCTGCCT GAGTTCACAC CTCATCTCTC CCACCTAACA CTGATAATT

SEQ ID NO:1369: (Length of Sequence = 319 Nucleotides)

ATTTCTGGTC TAAGTTTTAT TATTCCTTT CTCTGCTTG TTTAGGCTG ATATTGCACT TCTTACTCCA GTTTTCTAAG
 GTGGAAGCTT CGACTATGA TTTCAAATCT TTTTNCCTT CTAACTATG CATTCAATGT TATAAGTTTC TGTGAAGCAG
 TGATTTCAAT GCATCCACA TTTTGATAGG TTATATTTCC ATTTAGTTAC AAATAATTTA AATTTCCCTT GAGATTTCTG
 CTTGACTTA TGTGTTATTT GGAAGTGTAT TTTTATCTC CAAATATTTA GAGATTTGCA GCTGTCTTTA TGTATTTAA

SEQ ID NO:1370: (Length of Sequence = 343 Nucleotides)

GGAAACATA AATNTTGACA AGTAGTTCAA GACTGTTGGG ATAACTTAG CTAGAGTGCA GGTCACTACT ACCCATCTTT
 ATAAGGAAGC TGAAAGGGA AGTATGAGGA CAGGGAGAAC AATGACTTTN TCTCTCAAGC TTGACTTAAA CCACCAGGAA
 AGTCTTAAA GCCAAGCCT TTCTCAGACT CTCACCAAAC CATAAGAGTC AGAAAAATGG TCGTTTTCAA AGGAGTAGAA
 AATCTGTAC AAAGTAAACA ACAGCTGAAG CAGGAAAGN ACATACATTT NNTCACTTAG TGGCAGCAG GCAAAACAGA
 ACATAGGGCC AGCTTGGTTA TTT

SEQ ID NO:1371: (Length of Sequence = 295 Nucleotides)

ATTTCTNCCT GGGGGGGGAT GATCTGAGCA ATGCCCCCA CAACTTGGT TTTACTACA ACATGTCGT CATCAGCTTT
 GCCAAAAGCT GCCTTCTGGG CTGCACGGAC AAGATTGNT GAGGCTCTTT TCACAGCATT TCCTGCCGCC TGTAGCCGCC
 TCATGGCCTC TNAATCCTGG TCGGCCTTCA CCTTGCAGGC CACCAGCAGC TGAGCGTGG AAGCGCGAC CTGCTTGGCA
 GATGAGATGA GCTTCTCTC GCTGGGTGT CCTGAACGG AGGCATTGGC CGCT

SEQ ID NO:1372: (Length of Sequence = 340 Nucleotides)

TTTGCCTTCA GATAATGTT CTGTACTT TATAAATGCT ATCTGTGTA TCTCCTGTAT AATTNACAAT GTTTGCATGT
 AAAAAACAAA ACCCATAGAC CTTAAAAAA AGAAAAAAG AATATACAC TATACATAGG CACAGCTTAT GCCCAGAGCA
 TAGCAGGTGC ATAAACACT GTTGCTATAA ATGCAAGAAA AAGTCATTT AACCACAATC ACATTTTTTT NCATAAGNEN
 GTCTGAAATC TATACAATAT ATACATCTAT GTTCAATGT GGAAATAATA TTCTTTTAAA TTTCAAGGCG TGTATATACC
 CTGCAGGCCT GCATAAATG

SEQ ID NO:1373: (Length of Sequence = 315 Nucleotides)

AATCTGGGG GTGATTTAGA ACTTAGAGGC ATCTCAAAA TGGACCAAGC TAAATGGTAG CCTTTATTIN CTGTAATGAT
 TCACCATGGG AAAATTAGTA ATCTTTTAAA CTCTTACTT AATCTTATAT GTATTCCAAA TTINCTAAA AGAAATTAAC
 CTAGAGGTTT TACAGAACTC CATTTTTTTT TTATTNCCA GAAAGGAAA ATTTATCTGT NCTGTNATTT TGTAAAAAT
 CCTATTCCAG CTACTACTAT GGAAAAAGGA AAAGAAGAAA GGAGGAAAGG AAGGGAGAGA GGAAAGGAAG GGACG

SEQ ID NO:1374: (Length of Sequence = 327 Nucleotides)

GAGCCAGTGG TGCCCCCAA CAGCCCAATC TGGTACTCAG TCCAGCCTAT CAGCAGAGAG CAGATGGGAC AAATGCTGAC
 GCGGATCTG GTGATAAGAG AAATTCAGGA GGCCATCGCA GTGGCCAATG CAAGCACTAT GCACTGAGAT GCCTTGGCCA

SEQ ID NO:1362: (Length of Sequence = 358 Nucleotides)

CCATTCATTTC ATTTCATTCAA CAATATTCAT TCAACAAATG AAGCAAAGGA GCACACAGCC AAGTGATGGA GCAAAATCAC
AAATTAAAG GTAATTCAGG CCAGGTGAGG TGGCTCATGC CTGTAATCCC AGCACTTTGG GAGGCCGAGG CAGGTGGACC
AGCTGAGGCC AGGAGTTTNA GACCAGCCTG GCCAACATGA TGCAACCCCG TINTACTGA AAATACAAA ACAACAAAC
AACATAAAAA AATTAGCCAG GTATNGTTTG CAGGCGNCTG TAATTNCAGC TTAGTCAGGA GGCTTTGGCA NGGGCTTCAG
TTAGCCAAGA TCGGACCCTT NCACTTTCAG CCTGGGTA

SEQ ID NO:1363: (Length of Sequence = 312 Nucleotides)

TATTTAAATA ACGTGCAATT TCATAATCA GCACATTTAC TAGATAGGTA GGATACTTTT NATCCATTTG TGTGTTAAAA
AATTAGCGCA TGTTCCTCTT TATGCCACT TGTATTAGCA GAATAGTGT TCGGATTCC CTGAATGGT CTGTATTGAG
TCTGTATAGA CCCCAGGA AAAGGAGGAA TTCGCCGTGC CCGAGAATAG CTCCTCCAG CAGTTTANGG NAGAAATCTC
TAAACGTTTT AAATCACATA CTGACCAACT TGTGTTGATA TTTGCTGGAA AAATTTTGAA AGNTCAAGAT AC

SEQ ID NO:1364: (Length of Sequence = 345 Nucleotides)

CTGACAGATT TACAGATGCT GACCTATTGA AAAATACCAC AGCCAGAAATG GGCTAAACAG GTATATAGTT AATACAACCA
CCACCATCCT TTACTTTTAA CATAGCTCTT AGTAGGAATT TCATAAAANT GGACATCACA GCTAAAATGC ATTATTAATT
CTCCTATCTG CTGACAATAA AAAAGCAGCA AACTCAATGA TTCTATTTA AATGCACTAG ATGGGAATAT CATGTTCTAG
GGGTGTTTGC CTTCAAACCA AACCCACAGC AACACACACA AGCAATTTG GTATCCACCA TTTTAAATTC ACAATCTGAG
NCTAAATGAA TGGCTATTTA TATTT

SEQ ID NO:1365: (Length of Sequence = 255 Nucleotides)

CTCCAGAAAG CCATTGATCT GGTGACGAAA GCCACAGAGG AGGACAAAGC CAAGANCTAC GAGGAGGCGC TCGGGCTGTA
CCAGCATGCG GTGGAGTACT TCCTCCACGC TATCAAGTAT GAGGCCCA GCGACAAGGC CAAGGAGAGC ATTGAGCCA
AGTGCGTGCA GTACCTAGAC CGGGCCGAGA AGCTGAAGGA TTATTTACGA AGCAAAGAGA AACACGGCAA GAAGCCAGTC
AAAGAGAACC AGAGT

SEQ ID NO:1366: (Length of Sequence = 322 Nucleotides)

AAAAAAAAA TTCAAAGAA ACAGAGTAAT TTCTCTCTT GCCTCAGCCC TAAGTCATCT CCCAGACAAA AAAGCAATCA
TCATTGTCAA ATTTAAAGG GAAAAGGAAA GACTTTTATT TGANTGAAA GATTTTTTTC AGTGTGATAG AGAGGGAAGA
CTGAAATAAA CAGAATTTAC AACCTGCGA CCTTTGCACC TTCTCTTCT AGCAGTATGG CAAACTAAAT AACTTGCACT
GAAAACGGT TAAAAGCTG TATACTTTT TAAAAAATAT ATTINGNTA TGTATTGAT CTGCACAGTT TTGAATACAA
AA

SEQ ID NO:1367: (Length of Sequence = 349 Nucleotides)

GAAAACAAGG TCAACATCAC TCATCATTAG AGAAATGCAA ATCAAAACCA TAGTGAAATA CCATCTCACA CCAGTCAGAA
TGGCTGCTAC TAGAAATAAC ATGCTGGTGA GGCTGCAGAG AGAAAGGAAT GTTTATACAC TGTTAATGGG AGTNTAATTA
GTCAACCAT TGTGTTAGAC AGTGTGAAAA TTCTCAAAG ACCTAGAGAC AGAAATACCA TTTGACTGAG CAATCTCATT
ACTGGGTATA TAGCCAAGG AATATAAATT GTTCTACTGT AGAGAAAACA TGCATGCATG TTTGTTTGA GCACTATTTT
ACAAGAGCAA ACACATGGGA TCAACTTAA

SEQ ID NO:1368: (Length of Sequence = 379 Nucleotides)

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TTGCAGAAGC CTTCGGCTCAA GTATATGCTC AGAATCACAG AGCTGGAAGA TAAACTTGGG TCTCTCTAGT GCCAGAGNCC
ATGNCCTCTG ATCTCTCAAG GGCAGAGGTA TTACC

SEQ ID NO:1356: (Length of Sequence = 406 Nucleotides)

TTTTTTTTAG TTATTTCACT CTCTCTGTTA AATTTATCTG ATAGGATTCT GCAGAGAACA AAATTCAACA GGGCCCTGTG
GAGCAAGGAG CCCCTTTTCC CTATCTCCTT CCTCTAAGAG CTACACCCAG ACCAGCTGGT TATCAGOGGA GGCCCCGCTG
CTCCTCATGA GAACGCTGGT GGAAGACGAA GGTGATGGCA GTGGAGGCAG CATCCGAGG AGCCTGGAGT ACCTCATCCC
GGAGCCCCCA CTATATCAGT CAGTGGTTCC ACCCTGCCAG GGTCTNAAGT GCAGTCAGAA CCATCAGGGG GTNGCCGGAT
CTGACGGCTG TTNACACAAC GTCGGCAGTG CAAACCTAGG GACAGAAGGC ACANCTNAAG TCACTNCAGA TCCCATCTTC
CTACTG

SEQ ID NO:1357: (Length of Sequence = 231 Nucleotides)

TTTCACAAAG AATTTATGAT TGCTTCACCA GGTCACTAGT GAGCTAAAGT CAAGGAATGA CTACAATCTT GTAGCATTTT
AAAGTGATTA GAATTTGAGA AACTTTTACT ACATTATGTG TTAATATCAT AAGAACACTC CTTTGGGGGC ATTTGAATAA
TAAAAAGENC TACATTCTTT GCACCANGTG NTCATTTTCA CCCACATTCC AGTATTTTNC TCTAAGTTGG G

SEQ ID NO:1358: (Length of Sequence = 302 Nucleotides)

CACAACTAAT TTGTAAGCCC CTGAGCGCA GGAACCTGGT TTTTAAAGAA TGATGTATTC TTCACAGTGC TTTCCCTTTC
TGTTACCCAG GGAGCACATG GCAATATAAG GGCTCCTGGG ATTGANCTTT AAGTACAGAG AAAACCTAAG AATNCTTTTA
GATAGACAGA TAAGAGACCA CNAGAGAAGA GCAGATTCTA AGGTATNTGT GAGAAACGTT ATGTAATGAA AAGATAATTG
ATGACACACA CTTCAGAGN GTGCTGGCGA GATTTGATTG AAAAGCACAC GGCTAGGGCA CT

SEQ ID NO:1359: (Length of Sequence = 356 Nucleotides)

TAATGATGAG CCTCTGGGTG CAGGGAGAGG ATAGGACTTG ATGCTTTCCA GGGGAATAT TTAATAATTC AGTACTAAGT
TAAGTCTGTA TCATTTTACT TTTTATATAG TTTCTTATTT TATGTTGTAT GAGATGAAA GCTTGCACAT AAAAGATGAT
AAGAAATTAG AATTCATCGT TTCTGTGTA CCAAGAAGAA CCTAGTATGAT CTCTAAAAGA ATGTGTTGTA AAATATGGAT
TCNCTTTCC TTCTAGTACT CCCCTAGCAT GACANTGAGC GTGTGATCCA TTACCAAGTC TCCTCATGAA AACCACAGTG
AGTCAGCCCT TCACAGAACT ACTACGGGAG GAAATT

SEQ ID NO:1360: (Length of Sequence = 366 Nucleotides)

AAAATTTAAT TCAACTGACC CATCCACCG GGAAATGCCA CTAGGAAGGT GTAGCCTGCA GTTTTACCTA ATAAGCACAA
CTGGAGGGGA ATAGAAACAC AGAATTGTGA GGAATCGCA AGGCATGCTG CTCAGAGCAT GCCTAGCCCT GCACTGAAAG
CTATGAGATA CTGGTTCTGA GGCATGGCTG TGCTTGCTGG TGGGAGCGG CATCCTCCCT TGGCCTCCCT GGGACACCTC
CTGTGCTCCC TGCACGACAC TCCACGTGCC TGGGGTGTCT ACACAACCTG CTGCAGCTTC ACTAAAGAAC AGGTGGCACT
NCAGCTTCTC CGGGTCCTGC TGAGCACAGG GNCCCGCCAN CCTTGA

SEQ ID NO:1361: (Length of Sequence = 347 Nucleotides)

CCTCTACTG TCTGTCTGT GGGACAGTTG CTTCCCTTC ATCTCCAGTG ACTCAGCCTA CACAAGGGAG GACCAACAGG
NTCTAGTTTT TOCACGTGAT GGAGTTCAA GCTTTTTTTT TTGTTTGTG TTGTTTCGCA AAATAAAAAC AATACACATT
CCAAGAGAAA TGAATGCATC TMTGACAGG TCTCTATTTC TCATTTACAT ATGTACACAC GNCCCTTGAG TCGCTGCTGT
TGACACGGCC CNGTGTGGAC GGGTCAGGCC CGAGGCCCTT CCGGAGCAGA CCTGTAGCTC TCTGGGGGAT CAGGGCTTCC
ATTAGGGAGA AAGTATTAGC AGTTTCT

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CTGTCAATAC AGTTCACAGG GAAAAAGCAA ATGIGGTATT TTTTGTATT TTTTAAAGC TCCCTGGGTC CCAGGTGTTT
TGCAGTTTTT AAGNCTTAT CTGCTAAAGG AATGCCCTTT TAGGGTCACA GCAGGT

SEQ ID NO:1350: (Length of Sequence = 317 Nucleotides)

CTGTGCCCA GGCTAGAATG CAATGCGTG ATCTTGGCTC TCCTGCAAC CTCCACCTCC CAGGTTCAAG TGATTCTCCT
GCCICANTCT CCTAGTAGC TGGGATTACA GGTGTTACC ACCACGCCAG GCTAATTTT GTATTTTATAG TAGAGAAGGG
GTTTCACCAT GTTGCCCAAC CTGAACTCC CAACCTCAGG TGATCCACCT GCTCAGCCT CCCAAAGTGC TGGGATTACA
GGCATGAGCC ACTGTGCGTG GGCCAATAAA CTATATTTTN TCAAGCCAAA GTAGGACAAG CACAGTTTTT AAAAGGG

SEQ ID NO:1351: (Length of Sequence = 349 Nucleotides)

CGATGGGTG GGATGAGACT TCAGCTTTAT TGGAAATGTT TTATTTCCCT ATCTAAAAA ATACTAGAAA GAAATACAAC
AAAAATGTTAA CAGTTGTTAA TGTGGGCTC TGTAAATATA GATATTGIGT TACTTTAGTC TTTTTTTTAA TCTCAACTAA
ATTAAAAAG GAATTTTATG CTTTTTTAT CTCAACTAAA TTAAAAAGG AATTTTAAAA CCTAGTGTT ACATGCAAGT
GAGTCCAATA ATGGCAAAAT AATAATGAGG NTACATAGGA AGGGTGACCT AAATTTTAAT GGGTGAATAC TGGGTCCCG
GTACAAGTTT GANAATTTT GAATTTCCG

SEQ ID NO:1352: (Length of Sequence = 304 Nucleotides)

TTTTTACT ATTTAAAAGA ATCCTAAAT GATGGGTATT CTCTAAAGCA TGCGGGGCTT AAAACCTAGA TGATGGATG
ATAGGTGCAG CAAACCACCG TGGCAGATAT ATACCTATGT AACAAACCTG CACATTCAGC ACATGTATCC CAAGACTTAA
AGTAAAAGTA AAAATTAAAA AAGATGGGTG TTCTATATTT ATCTTTCATG TTACATTTT CTGTGTTGGG TTCTAAATA
AACTTGTAA CATGAATGTT TTATTTCTAT TCTGTATTT AAAAGAAGC TGAGTAACAA AAGG

SEQ ID NO:1353: (Length of Sequence = 307 Nucleotides)

CTTAGTCTGA CATTAGGTTA TGAGAAGTAC AAAAGATCCA CAAGTACAAA AAAATCTGTA TAGCTTTGCG GTAGTTGAAA
AAAATGCAAG AGAACAAAA AATTTTTGA GTAATATCA TCCTGCAGA TCTGAGTAC AGTCCGCTG AAACACCGCT
GTAAAAGTGG TAAAAAATGA TTTCATTGIG ATTATGTTAA AATTTTTGAT GTCTCTNTA CTGTTTTAG GGAATCTGG
TCTTCTENC ATTATACCT GGATANGINC CTTCCCTGT AATTTTINCT GAAAGGCTCC AATTTCC

SEQ ID NO:1354: (Length of Sequence = 407 Nucleotides)

GTGAAGTTAA GCAGCAAGG CTGAGAACCG CTGCTCCAGA GAGGCCAGGA GGCTGTGTA GAGGCTGGG CCCCAGCCCC
CAGGCACCTC TCTGTGTCAG TTCCCTGGA GAAGTCATGA GTTGAAGAG TAGGCAGAG CCAGGTGTA TCACTGATC
ACTCATCAAT GGCCAATGAG AGTNCAAAGG GTAGCTCTGA GCACAGGATG TTAGCAAGA CTCTGGGT CAGCTCCCAG
TCCCACCANT GCCAAGTGGG GGATCCTTAG CAAGGTACTT ACCTTTTNN TGCTCTGTT TCTACGGCTG CAAATGGGC
ACAATAATGT CAGATTCATG AGGGATAATG AGGACTAAAA TTAGNTAAT TNCCTATAAG CTGCTTCTAA ACGTATTTAC
TTATAAA

SEQ ID NO:1355: (Length of Sequence = 355 Nucleotides)

ATTACTATTT GCCTCTATAG GAGGTTTCAT TAGGCATCTN CTTCATTATG AGTGCAATAT AATCAAACAC TTATCAGTAC
AAGGCAGAGA GACCGGACT AGCTGCCTAC ACATCCTCAA TGAGCTTTAG GAAATGTGAA GGAAACATGG ACTGAAAATC
TTCTGGTGGC AGGTACTCTC ATGTGTGTC CTATCTGATG CTCTCAACAA CCTCTAGGG TAGATATTGT GACCTCATC

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GAACCCAGGA GGCGGAGGTT GTAGTGAGCC AAGATCGTGC CATTGCACTC CAGCCTCGGC AACAGAGCG AAACCTCCATC
TTAAGAAAAA AAGAAGGGTG TGATAGTTAA ATTTATGCAT CAACTTGGCT AGGCAATGGT GTCCAGATAG TTGGTCAAAC
ATTATCTTAG ATGTTTCTGT GGAGGTTAAT TTTTAGATGA GATTAGCCTT GTAAACTGGT GAAAATTGGG TGAAGGAGAT
TACCTGCAAT AGTGTGGTGG GTCTCATTTA ATCAGCTGGA GGCTCAATA GGGAAAAAGA CTCACCTTNC CCTGGAGCAA
GAAGGAATT CTGCCCAGC AGAACTTCTT NGGCGAGCAG AATGCAACCA TAAACTCTT

SEQ ID NO:1344: (Length of Sequence = 400 Nucleotides)

GACGGATGGG ATCGGGGCTG TGCTCTGCAG GTCTCCCCA GAGATGTTGT CATACTGCGA GGGATGCCGC TCGTAGGACA
CCCTGCAGCC AGAGCCGTCC GCGCTCTGNN AGGCTGCGCT CCTGCGCTTC TTCTGGGGA GAGCAGGTGG CGTATCTNN
TGCTGCCCTG GGGCCAGAGG TCCGNTGSC TGGGGATGGC CGCCAAGAGG CAGCTGGAAA GGAGGGCCAA GAAATGGAGA
CCCAGACTCC CCCAAGACT CTGGCAACGG GCTAAGGTTT CAGGGCCGTC TGCTGAGGTA TCTGGTCTGC GTTAGAGAGG
TCTTNTGGA GGAATTCATA GTCGGGATCA TAGCAGATCT TGTCCTTTT CTATACCATC TGTCCTATTT GGAGATNGCT

SEQ ID NO:1345: (Length of Sequence = 347 Nucleotides)

CCTCTCCCC CAAGGAGCTT GCAATTTTAG GAACTAATCC AGTTTGAGGG CTGAATTTAA GTTAAATCA ATTACTGCCC
TATGTAATCC TTTTAAACA ACATTAGGTC AAGACCTTT CAGTGCTAAA TAACTGATT TGTCATTATC ATACATTCAA
GTTTTATAAA TGTGTTTTT CTCACTTCAC TGAATATCA GAATCCAGCT CAAAAACAGA ATCAAAGAGG AGACTTTTAA
GCATTATCAA TAAAACTAT GGTACGGTAA TATTCAAAT AGTGAAATC ATTATATTAT CTAAATCTT CAGGAACTG
CTTTAACCAT GGATTAAATA ATTTACC

SEQ ID NO:1346: (Length of Sequence = 287 Nucleotides)

CAAGTCAATA CCCATAATTA AGTCAAGTTC CCAGCCTTAA TTATATTNT NTCTCGCTCG TTCACTCTCT CTCTCCTCC
CTCTTCCCT CTCTGCCCCA CCCCCTGTA CATTATATAC CAATTCATTG GAGATATATA TAGTNTGNN TNGTNTG
TGTGTGNNC TGTGTGTGTG TGTGTGTAA AGAAGCAGGA TGCTTACAC AGATGTTTCA TATATTGAGG NATTACAGAG
TAATTACAGG GAAAGGTATT ACACGTCTT TCAACACCT AGGCAGT

SEQ ID NO:1347: (Length of Sequence = 295 Nucleotides)

ATTAAACAAC TTTTTTAAAC TTTTGTGCA CAGGACAGAA AACTGCCTGT ACATGCTATG TCCACTTTTG GAACACAGAT
TTTTAAACAT TATGAATGCA CAAATCTTA CATATCATGC AACTCTATGC CAAGAACCA ACTTCTTCC ATGCAACAGA
TATGAAGATC TAAATGGAAA CCTAGCTAAG TCTTAAACAC TTTCCAGTA GCAAGTATAA TATATGTTGT TGAGGGAAAA
CCAGTCTTAA CAATTNCTTG TACACAATAT TCAATGTGCCA AATACAATGN CAGGN

SEQ ID NO:1348: (Length of Sequence = 332 Nucleotides)

AGTCCTGCT ATGTTGATAT TTGGTAGCAA TGACTGATGT GGAACTACA TATGCAGATT TTATGCTTC AGGAAGAACA
GGTAGAAGAA ATGCAATACA TGATATCTG GTTCTCTCTG CAAGTGGCAA CAGCAATGAA TTAGCCTTGA AATTAGCAGG
TCTTGATATC AACAGACAG AAGGTGAAGA AGATGCACAA CGAANTCTA CAGAACAAG TGGNGAAGC CCAGGGAGAA
GCAGCAAAAT CTGAAAGCTT AACACCCAC TTTGACCTC GGCCACACCT GAAAATGTCT CAAATCTCCA GGGNGTATCT
GGGAATGCAT TT

SEQ ID NO:1349: (Length of Sequence = 296 Nucleotides)

CCCCAAAAA CAATGACACA AAATTCATTT GGTTAATTCA TGTAAGGAA AAAACAGCAA CACCACCACA CAAACAGGAA
AGTGGGAGTA TGATTAGGAG GGGTGAGATG AAAACTATTT TACAGTAACA TTTCCACCA AAGACTGTCC TAAGAACAG

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TTTGATAATA AACATAAGCC AAATCCAAAA AAATGTTCTG GGTITTTTCCA TCATTTCAC TCATTAGINC CAGGAAAA

SEQ ID NO:1337: (Length of Sequence = 272 Nucleotides)

CTTTCCCTCAG TATCAGAGT ACCGTGTTTIN CTGGAATTTA TTAAATGT CACCTGTAG TGTCCCTCT CTAGGGCTGT
TTGTTTCATT TCCCTCTGAA TGAATGCTGC CACACGGTCA TATGTGAGCC AAGTTTACAA GAATGGAGTT GCTGCTGAAG
AGATCTCTCA TTCATCTCCC CCAGTGCCTG TCCTTCACAA TCATAACGTT ACCCTTGCTT GACAAATATA CTGTATGGCA
AGTCATAAAG GTCTINGAAC AGGACTTGAC CC

SEQ ID NO:1338: (Length of Sequence = 212 Nucleotides)

TAGTCCCCCTT TATATAATAT AATCAAGTTC CTCCATCTGG GCATTTCAGT AAATTCTACA ACATTGCCAA AATCTGATTT
GACTCTACAG AATATGTATA GTTTATTIAA CCAGATAGTA ATTTAAATTT TTACAACATG CGTATTTTCAT GTAATATTAA
TAACAGTAAT TTAAATTAAT ATTCAATACA TACCGTTTGA ATTTTATAA GG

SEQ ID NO:1339: (Length of Sequence = 280 Nucleotides)

TTTTTAGGAA TAACAAATGT TTATTAGAA ATGGATAAGT AATACATAAT CACTCTTCAT CTCTTAATGC CCCTTCTCT
CCTTCTGCAC AGGAGACACA GATGGGTAAC ATAGAGGCAT GGGAGTGA GGAGGACACA GGACTAGCCC ACCACCTTCT
CCTCCCGGTC TCCCAAGATG ACTGCTTATA GAGTGGNGGA GGCAACAGG TCCCCTCAAT GTACCAAGTG GTCACCTATA
GCACCAGCTC CAGATGCCA CGTGGCTGCA GCTGTACTCA

SEQ ID NO:1340: (Length of Sequence = 324 Nucleotides)

CIGTTCACC TCAGATCATC AGGCATTAGA TTCTCATAAG GAGTGTGCAA CCTAGATCCC TCCCATGTGC TGTTCATAGC
AGGATTGCA CTCTATAAG AATCTAATGC CACTGCAGAT CTGGCAGGAG GCGAGCTGA TGGTGGGAAG GTGGTATTGC
TCGCCTCTC GCCTACTGCT CACCTCTGC TGTGGGGTCC AGTTCACC ACAGACCACT GGTCTNTGAC TCAGGGACCA
CTACCTCT AACANGNTG AGGAAACAA CTGGGTTCAT CACACAATTA TTTAAAGTT CAGGTTTTCN AAATACTTAA
TCCA

SEQ ID NO:1341: (Length of Sequence = 376 Nucleotides)

CTAATCAAGG GTACAAGATG TCTAANTCAA AGGCCAGCT CTGCCTACAA GTCAAATATC TAGGCCTAAT CTGGCCAGA
GGAACCAGG CCCTCAGCAA GGAATGANIA CAGCCATATC TGGCTTATCC TCGCCCTAAG ACATTAAAC AGTTGTGGGG
GTTCTTGA ATCACTGGCT TTGCGGACT ATGGNTCCCC AGATACAGCG AGATACACTC TAAGGAGACC CAGAGGGCAA
ATACTCATCT AGTAGAATGG AGACCCAGAG GGCAATACT CATCTAGTAG AATGGGGACC AGAGGCAGAA ACAGCCTTTC
AAAACCTTTA AAGCAGGCCC TTCTTNCAG CTCCAGCCTT TAAGCCTTNC CACAGG

SEQ ID NO:1342: (Length of Sequence = 335 Nucleotides)

ACCTTCCCC ACTCCCTGGT CCCCAGGAGC AGCTCTTCT GCGGANTNA CTCACAGTGC AGGGAAGGA GGCAGGGAAA
AGACCAGGAT TCTGTAGTIT CTGAGGTTGC CACACACAAA GAAGCTGTGG TTCTCTGCC TCGGCCACTG ATGAGACTAA
AACTGGCTTC CCTTGGAGA CGCAGATT T CAGGCTGATC CCTGCTTAAG CCTCTCATC CCCACGCTGG TCCGGTATT
GATACAAGAC CCAGCTGGTG ACAAAGCCTC CAATCCTGGG GGTCCACGGA GCCTGGGGCT GANATTTCCA GGAACCTATCC
GCCAGTGGGC GCCCA

SEQ ID NO:1343: (Length of Sequence = 379 Nucleotides)

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CTAGCTGAGA CTATTC AAAA ACAAACTTTT TATCANATTG TNATCATAAT CAACTTTCTA CAGGCTAATG ACTTTATAGN
TTTACTNCTA GTGTATATCT ACTAGCACAA TTGGACCCAG TTCC

SEQ ID NO:1330: (Length of Sequence = 221 Nucleotides)

CAATATTTAA ACAAAATGCA AAACGTGAACG TTACCTCAAA ATGAAACAGT GTGTGTACTG GCTGTTAGAA GTTGATGGCG
GTCTACTGTT TGATATTAC TGCCATCTTC CTCTGCCCCA CTCTACCTCA ACTGGGACC GCCTCACCTA ATGGTGGGCT
TTGCCGCTTT ATGCCNIGTA GAGNAGACAC TGGGTAAACCA CAGCAAATCA ACACGGGNTC C

SEQ ID NO:1331: (Length of Sequence = 279 Nucleotides)

AATAGAGATA ATGGTCAACT CTTGAGAAGA ACCAAATGCT GGTGCCATCT TGGAAAGTCT ACATCACCTC CTCCTCTTAC
TTCCTTGAAC AGCAATATTT CTGGATTCT TCTGCAAGCC CCAGGCAGTG CAGGATGCGT TTNTTTTCAG CAGCCAGTTC
CTTCTCAGAG AACTGGCCCC AGAGTTCTG GACAAATATA TTTTGATCIT TCAGAAATAT GTTCINATTC ACTCCTACAT
TTGGCACATT NTCCAAGGGC CCAGACTTGA AATTGGAGG

SEQ ID NO:1332: (Length of Sequence = 290 Nucleotides)

GGACGAGGAG ATGTCTTTGG TGGACTTGGG AAAGAGGTTG CTAGAAGCAG CAAGAAAAGG CCAAGATGAT GAAGTGAGAA
CGTTGATGGC AAATGGGCGC CCATTCACCA CAGACTGGCT TGGAAACATCA CCCCTCCACC TTGCAGCTCA ATATGGTCAT
TATTCACAG CAGAAGTACT CCTTCGAGCA GGTGTAGCA GGGATGCCCG GACTAAAGTA GACAGGACCC CCTTGCACAT
GGCTGCAGCC GATGGACATG CGCACATCGT GGGAACTGCT TTTTCGGAAT

SEQ ID NO:1333: (Length of Sequence = 201 Nucleotides)

CGCCAGCTA ATTTTGTAT TTINAGTAGA GACGGGGTTT CATCATTTNA GTCAGGCTGG TCTCAGACTG CTGACCTCAT
GATCCACAG CCTTGGCCTC CCAAAGTACT GGGATTACAG GCATGAACCA CCACGCCCAT CTGATTTCCC GTTTTCTGCA
GGGTAAAGNC TCAGGGCCGG CCCATTGNTT TCAGGANITT T

SEQ ID NO:1334: (Length of Sequence = 267 Nucleotides)

NNATACTTT TIGTTGAAAT TTAGAAAATG TGGATCTTTT ATACTTGCTT TCCCTTTTCT TCTGCCATCT TTATCTTCTG
CTGAAGGAGA CAAACAATAT TTAGGTGAC ATCTATCACT TTATGTAGGA CCTGCAACA CTCATGTTGT CTTGGACAG
ACAAATGGAG AATGTAAATC TGTTACTCTG TGACAGGATA TAAITNTGGA TTGCATAGGN TTNCAACAAA GTGTCTGTGT
GATGANTAAA TGGTAAAATA TATTTAT

SEQ ID NO:1335: (Length of Sequence = 279 Nucleotides)

GGNTCTTGTT AGAATGCAGA TTCTAATTAA AAATGTGTAG GACAGGGCCT GAGACTCGGT ATTTCTAACA AGTTCCCAAG
TGATACTAAT GCTACTGCTT CACAGATCAC ACTTTAAATA GTAAGGTTCT TGAGAGAGAT TAGTCTCAAG AGAAAAGAGA
CAAAAATCTC CAGAGCAGGA AGACCAAGAA AAAAAAATGG AAAGTAGCCA GTCGATTATC AACTAGATGG CCTTAGTGAG
ATTCTGCACA ATATTTTATC ATACAAAAT GNTTTCCCA

SEQ ID NO:1336: (Length of Sequence = 398 Nucleotides)

TTTTTTAAGC ACTCTTGTTT GGACTGGTCA AAGATGTTCC TAAAACAACA TTGCTGTCAC CAAGCCTCCC ATGANITAGG
CTGGCTCCTC CCATGTGGAT ATCTGCTTCT GCATAGTTGG TGAAGAGGAA GCATCCTCAG TCAAAGCTAC CAGCTGAGGA
ACCCTTAGGA AACCCCGCTG GTACCTGGCC TGINTTTTGT AAGTATACAT CAGGCCAGGG GGCTGCTTGC CAAGCAACAT
CATTGACTGC ATACTGTTTA GTGCATGCAT TACCAGGGCT CAAACATCCA AGTGATGCTA CCTGAATAAG TCGAGGAATT

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CGACCTCAGT GTAAATCACA AAACGGGAAG AGCTGATATT GGCAAAATAA TTACATGGCT CATTTCCTTG CATGTCAAAA
TAGGATTGA TTGGTTGTAA AAGATGACAA ATACCTTTNC GGTTTCAATG TTCTTAAGTG GGAAGTCACT TATTACAGAC
CTNATTGGGA GTAAACAAAG CTGTTAGACC TTTCATTATC AGTCCNNTTA ATCCCTTCAA TAATCCCCCT AAATCAGTGA
GGCG

SEQ ID NO:1324: (Length of Sequence = 279 Nucleotides)

GATCCATGCC ACAGTGACCT CTGTNACCCT GCACAGCACA GAGGGGAAAG CCCTGTACCA GGTGGCGTAT GAGAATGAGG
TAGGCAACAG CTCGTACTTC TATGACATCG TGGTCATCGC CACCCOCTG CACCTGGACA ACAGCAGCAG CAACTTAACC
TTTGACGGCT TCCACCCGCC CATTGATGAC GTGCAGGGCT CTTCCAGCC CACCGTCGTC TCCTTGGTCC ACGGNTACCT
CAANTCGTCC TAATTCGGTT TCCAGACCC TAAGCTTTT

SEQ ID NO:1325: (Length of Sequence = 338 Nucleotides)

TCAGTTATTT GTGTGTGTGT GTGTGTGTGT GTGTGTGNCAT CTGCAAACCC TGCATTTCAT TATCCAAAAA TTATTTGATA
TTTTATAATC AGAGAAAATG CTATTTTFAA ACCCTACCAC TGCTGACCAA ACAACAATCA CAACAGCATA AACTAAATA
CTGTCAACA AATCTATTTT AGTGTAGTAA TTAAATAATT CCTAAAATTA TAGACATCCC TAATATTCTT TCCNTTAGTG
GTTCCTCAGA GTGCAATCTG TGGAGCAACT ACCTTGAAGA AATTGGGGG AATGAGACCN TGGGAACCCT AAATGTTTAG
NATGTGCTC TNGGGGAC

SEQ ID NO:1326: (Length of Sequence = 393 Nucleotides)

AACTTTGGAG GGGACACCAT CACTCAAACC ATAGCTGTAA ATCTATTCCT TGAGTCCAGA TCACAAATTA CCAATGAAC
ACGTTCTCCA TTTTGTAGTAC TTTTGTACCT GTAACCTCT GTCTACCTAA GATGAATATT TATTCATTGA ATGAATCATT
TAATTTTGGT GCCCCAAAT TCTCAGTGA ACAATTCTG GATACCTCTC CATCACTAAG ATAATCACTA TAGCAGTGTG
ATATTCTTCA ACTTAGNACA AATCTAAAGG CTCCATTAT CCCTACTAGA AGTGTCTGT TGTCTTTTTC ACTCTCAAAA
TATCTCCAT GCGCNAACCA AACACTAANG GGNACCACCA TATCTTGCTC AATGGAGGCN AAATCACTTT TTA

SEQ ID NO:1327: (Length of Sequence = 381 Nucleotides)

CTTTGGAGAA TTAATTCAGC AGTTGGTAAA ATCATTCAT AATAATGGT ACCATTCTGC TCTGTCCAC ATTTTATGA
AGTCTCTTTA AATTTAAAAA GGCAATGTG TTTGTGGTTC TTGAGCAACT TAAATACGTT GCTCTGAATA GTTATTGTGA
TGAGGTAAAT TGTAACAACT TTAGGATCA ATGCTAATTT NCTTAAATGT TTCTGTAGTT TCCCTTTTAT TATAAAGTAT
ATTAGGCTGG ACTCTTGGCT GTAAGTGGCA GAAAACCTCAA CTCAGATTAG TTAAGAAACA AAAGGGTGT GGTGACAGTG
GTGGCTTTCA GACTATTGCT GCAGGCCAC CTGCCATCCT CTTACACCCT CAACATACCC T

SEQ ID NO:1328: (Length of Sequence = 289 Nucleotides)

AGAAGAAAT TCTTAAGCAG AGTACTTAAG TACAAAATG AGTGAATGAA AGATGCTTAA TCTAGGGAAA TTAAATGAGA
AAAATACATG GTGTGTGINT TGGAGGGGGA GCTGGAATTG GAATGGGCTG GAGTGATGAA AAAAGCCAA CAGATATAGT
CTTCTGTTTT GTAATATAGG CTCAATACTA AATTATGTAG GACTAGATAA TCTAGGTCCT AATGTCTCCT TTTTGTCTGC
AACCTGGGG CCAATTACAC TAGAGGGTGT GTAGAAAAA GAGGAATAT

SEQ ID NO:1329: (Length of Sequence = 364 Nucleotides)

TTGTATATTT GGGATTGTCA ATAATCTAGG CCACGTGGAA GATAACAGGC TATTTTGGAT ATTTNCTAAT TGCAATGGTT
ATATTTCTGT GTAAATGCCT ATACAAATGT TTGCTTGGTG ACATATGGAA AACTTAAGGN CTTTATGAA AAGGCGACAA
TGGGGACCTC CAAAGCGCCA AAGTTTCTGC TAGGCATAGT GTTATTTTGA GATTACATTA AAATGGCTAT TTAGACCCAT

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SEQ ID NO:1317: (Length of Sequence = 316 Nucleotides)

GAATTCOGAT TATAAGCATC AATATGCATA AAATGCTTAG AGATGGACCT GATATATAGC AAACACTCAG TAAATGTITAA
 CTATATTAT NACAGCACAG CAATTTATTT AAGATTACTG AGTGTTCAAA TGAAAAAAAA GACATATTAA CTATATAGT
 GCCATTTCTG ACATAAGAAA TACACAAATA GAGGTAGTTT CTGAAACAAA GATCAAAAAA ATCTATTGTA TGGTGTCTTG
 TATCAATGTG GCTAAAATTT TCGAGCTAAG TTTTATNAAA GACAGATCAT ATTTTCANGTA GGTGATTTTT GTATTG

SEQ ID NO:1318: (Length of Sequence = 300 Nucleotides)

GTGGGACTAC AGGTGCACGC TATCATACCC AACTAATTTT TGTATTTTIA GTAGACATGT GTTTCCTCAT CTGGCCAGGG
 CTGCTCTGAA ACTCTGACC TGAGGTGATC CACCTGCCTT GGCTCGCAA AGTGTGGA TTACAGGTGT GAGCCACAA
 GCCTGGCCCA TTTATTTACT TTTAATTTT CATTTTCTT CATCATGTAG AATGGACAAT TTCAGGAAAC TGATAGAAAA
 TACTGTCTAA CATCAATTT TCAAAAAGT TTCTCTGTAA CAGATAAGGC AGTCAATTTT

SEQ ID NO:1319: (Length of Sequence = 306 Nucleotides)

CAATAAGCTT TAAAAAGTTA GTGCCACATG ACCAGCATCG ACTGGCCTCA GACATCTGCA AGCACTCACC CAGGCCACAG
 GGTGAGGTAG AGGCTCCTG GGCCCACTGT AGCCCTGCT GGGTCAGTGT AGCTGGAAGG CTACGGGNCC TTAGTGGGGA
 GCCACAGCCT TTCCCACTAG GGGGCTCTC ACTCTGACAT CTCCCTGTGG TGTTCGGACC AAGGGTGGGG AGGGAGACAC
 GCTGGCCCTA AAGGGAGGTG GTAAATNAGTG AAGATCTCCA GGGCCAGNCC ACAGGGCTCC GTCCAT

SEQ ID NO:1320: (Length of Sequence = 373 Nucleotides)

GGTCTTGATC TCCTGACCTC GTGATCCACC CGCTGGGCC TCCCAAAGTG CTGGGATTAC AGGCGTGAGC ACCGTGCCTG
 GCGAGATAA TTATTTTINA GTGACGATTT AGCAACCTGA AAACCTTGGG TCTTTGGGAT ATGACCTCAG TATCAACACA
 GAATATTTGA ATGCTGGTTA ATATATTINT TTTAACTGT GATAGAATG AAATCTTGTA GCCACATTTT GAAAGTTTAT
 TCTTCATTAA CTAGTCTTTT CTCACCTGAT TTTCTACAAG AGAGAATTTT CCAAAGGTT AGTTGTGTTT ACATTAAAGAA
 CTTGGGGTTT GNTTGACATG AAATGTTTCT ACACCAGCAG GTCTCAGATG AAT

SEQ ID NO:1321: (Length of Sequence = 366 Nucleotides)

GTITGGCTAA TCATCCTATG ATTTTCTIAT AGCTTGAAAA CTTTTATAT CTTAAATTTT TINATAATTT TGAAGTATTA
 TGTITGGGC TTGTATATC CAGTGTATTT TCAATTAAT TCCCTAAT AAAGTAAATC AAAAGGAATA AAAGTGTAT
 GTGGGCTGGG CGTGGCGCT CATGCCGTGTA ATCCAGCAC TTTGGGAGG CCAGGCGGC AGATCACCTG AGGGCAGGAG
 TTGGAGACCA GCTGGCCAA CATGGTGAAA CCTGTCTCT ACTAAAANTA CAAATTAGC CGGTGTGGT GGCACATGCC
 TATAATCCA GCTATTGGG AGGCTGAGTC AGGGAGAATC TCTGA

SEQ ID NO:1322: (Length of Sequence = 362 Nucleotides)

AGGGAGGGTA AAACAAATCC CCTTCAATG CTTGTAGAA GGGGATTAGA ATCACTGTGG AATTGGGTAT TGGCTAATAA
 AGTATAACG CTAAAGATCA ATGCCTGAGT GCACAGTGT CTTCAAGCC ATTGTACTTC TGCTTTCCAA GANTAGANGA
 CTACTTTTAA ACCAAGANTT AAAAATAANC TCATAATTTA AACCTCTTT TCATGCCAAA TGGAATCTTT AGTGTGAAT
 AATCAGGCTC ACCTGAATAC AAAGTTGTCC TGAAATGCT GACAATCACA AAAAAGGTTC TAGAAGCTTT TTCAAAAAAC
 AAGTTCAGAT GGTTCCTACT GAGTTACTAT TTGAGGTAA AG

SEQ ID NO:1323: (Length of Sequence = 244 Nucleotides)

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SEQ ID NO:1311: (Length of Sequence = 331 Nucleotides)

AGCTCAGATT CATGTCCTGA GCCAAACAAG TGAATGTATC TNAGAAGACT CAGTACCACA TGGTACTGGG AGATCTTACT
 CACTTCAGCT GCGCTTGCTC ATTAGTGAAT GTATGACAGC AGGATGTGAG GGGATGCCCA GGAGTCAGTG TTAGCATTGT
 CATCTGAGAT CACTGCTATT AATATCATCC ATTAATTTAT TAGTGAGCTT CACTATATGC AGACTGGGAG ATAAGGAGAA
 AATCTGTAC ATTCTCTCTA GCTAATCAGA TCAGCTACCA ATTAATGAGA TTCTGAATGA AATATCAATA TGIGTTTTTC
 TAATTTGGAC C

SEQ ID NO:1312: (Length of Sequence = 347 Nucleotides)

TTTTTTCCTT TATAAATTAC CCAGCTTCAG ATTTTITINAT AGCAATGCAA AAATGGCCTA ATACACTTCA GAACCTGGAA
 GATTAGCAGT GAGAAATAAA ATCAGTTAAG TTGATGACTT CTAGTATTTT ACTACATGGT TGTITTTGCCA AAATGAAGGC
 AATATCAGTG TCTTCACACT TAAAAAGTAG TATATTGANC TTTGAGGTGA AAGAGCTGGG GTTTAAATTT GTNCTTTACC
 AATTATTGAG ATAAGTGTC TTGAGCAAGT TACTTGCTTT CNCIGATCIT TAGTTTTCTT ATTTGTGAAA TTGGAAATGG
 TGGTGTTC A GAGGGGGTT GTATATA

SEQ ID NO:1313: (Length of Sequence = 336 Nucleotides)

GAATTCCTCT ATCAAAGTGT TCATAAAACC TGGAGCTGCA GCTGCCCCC ATTAGGTAGT TTCTTGGTGA ACGTTTTCCA
 AGGAAACTT TTTTTTAACT ACTTCATAAA GCCAAGCACA AAAGGACATT GCAATGACTG GCTGAAAGAC ATGGGACTTT
 TTGTCTTCGA CGACTAAAC GTTAAATGGG GGCTTACTTT GTGCATTTAT GGAAGAAAAC TTGGAAGGCA TTAAAGGCTA
 CATTTTGAGC CTGTCATGAT TTCATTCAAT TATGCATGAA TTCATTGTT CAACATTTAT TTAGTACCCA CTATATGCCA
 GGCACGTGC CAAATG

SEQ ID NO:1314: (Length of Sequence = 391 Nucleotides)

CCGGTTTAGA CCTCAGTCGG CGCTGTGAGG GCACTGTCCG CCCACCTGCT CGGCTGGCTG AGCTAGGTCA GTGGAGAGAA
 GCTGGGGCCA CTCACACAGC ACAGCAGGCC ACAGTCTACA GAGTAGGCCA GGTAGAGCGG TTAGAGTGCC AGCCGCTGGA
 GAAAGGGTTA TAGAAACACA TCCCTGACTC TTTGGTTATG TCCCACTGCC TCTGTGCTC CTTCCTCTC CTTACTCTCC
 TTCTTTCTG CCTCTGTG TCCCTTGAA GTCCCTGTTG TCAGTGCATT TNAGTGCATT GACGTGCTCT AAACACTGAT
 CTNCACACAC CTCTCTTAT CTTCACCTG ATAGGCAGGC CCCAGANCC CTTTTTCTCT AGCTTTGTT T

SEQ ID NO:1315: (Length of Sequence = 374 Nucleotides)

GAATTCCTG GAACACTGGT GTTACAGAG AGAGATACTT TGTGGAATGG AGCTTACATG ATGAATGAAA AAGAGACCGT
 TAAAAAGTAC TAGCCGTGT TTACAAATAA CTACCAGGTA AACAAAGAAA TCACTTTCTT TCCCTTTCT AAGGATAAGG
 GAGAATAAAA TAATCACCAA GAGGCATGGA GTTTGAAAAG TATATAACAG ATTTCTTTAT TATTATTTAC AATCAAGTTC
 TGTGNCNCA CATAATGAAA TAAATAAAG ATGTGCCCTG GCGTGTGAAT TTCAACTCTC CTTGACTTAA GTTCTCTGAA
 GGGCAAATTG GAAAGCGGTG ATCAGGCAGG GAAGAGAGGG CAGGTGGAGG CCAG

SEQ ID NO:1316: (Length of Sequence = 353 Nucleotides)

CTTGTTTACA GGTITTGAAA GGTITGTNAG ATTAGTATTT ACTTTTAATT TTTTGAGTAA TAGAATGCGT TTAGGTCTTA
 AATTACTATG GAAATGGCAT AGTGAGGATT CTNCACAGAT ATTAGAGACC TTCAACAACA TAGTGAAAAT AGATTGTGCC
 TTTCTTGTA ATAGCTGAAC TATGAAAATT TGANCTGTCA CTGGAGGGG CATTTGCNCT GAAGTTTGCC AAAGTAAAAA
 TAACTTINCT CTTTGTAGTAA AAAAAGCTAT ATTTTINCAAT ACTGCCCTGCC ACAGCAAACA AACAAAGTCT TGTTTGTGT
 TTAATATTGG CAAAGGAAAA ATTCTCTATA TAA

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SEQ ID NO:1304: (Length of Sequence = 211 Nucleotides)

TATTTTTCNC TTCTTCCTC CCTACATATA TTCTAAACCT TCTAAAGTTT TTINATTTT TTAAGGATCA CTTATCATA
 AAATAAAATA TCCTTTTCAT ATAATAAATT ACCTAATAAA AAGTCTTTT TTTTCATATT AGCCAGGTC CTTGCTACA
 TTTATATGGT AATAAACGCC TTTATTAATA TAGATATTA AATTATAAAG A

SEQ ID NO:1305: (Length of Sequence = 316 Nucleotides)

GAAATGATTC AGGGAAAAA ATTTATAGTA CGTTTCAAC TTTTTTTTT TTTCTTTGAA ATGGAGTATG GTCATAAAAA
 GGACACTAAA TAACCTGATT AAGCTAGAGT ATAGACCAAA TTGCCACTTA CTTTGAATG TTTTACCA AGGTATCACT
 TTGAATAAAG ATAACTTTCA TTAGACATCT ATCTTTATGT GTTCTGCCA TCATTTCACT GAGATCAGAG GAAAGTTAAA
 TTAGGAACAA TGAAAAAGCT TAAGAAATGA ACAATCATCA TGCCTTTGTG TATGCTTAAA GTGAGTACAT GTAAAA

SEQ ID NO:1306: (Length of Sequence = 310 Nucleotides)

GGGGATTTTT GAAGGCTTCG CTGTGGATGG CCGAGAACCT GCTCGGGGTG TAGGTCTGTG TGCTGGGGG ACAGTTTCCA
 CATCTGAGCA CACGGACTGG ATTTCTGAAA TGTCAAAGTC TGATGCATCA CTGCTCGGC GGCTGCTGGC CCCTCTGCCA
 GCTTTGCTTC CAGCTCGACT TCCTGGTCGG CTGGGAGTCT TCTTGAATC AGCAAACGT GTTCGGACTC TGGCAGNIGC
 AGTTGTATC AAGCCACTGT CCTCCCANNA GTGGAAGCCT TTCCCTGATA AAAATCCTGG AAGTCGAAGC

SEQ ID NO:1307: (Length of Sequence = 302 Nucleotides)

TAATAAATAG TATATGTAGT GAAGAAAAAG TTATAACAAG TATACATTAC ATTAAACACA CCTAGCACAT AGGACACCCCT
 CAACAAACAG CTACAGCTGC TGTAATCAT GTGTATATAA TATAACATGC AAGCATATCT TCATGTATG ATTAATTACT
 ACTTCTTGA AAAGGATCTG AGGAACATAT TTAATATATT TNATATGCCT GCTCATATGT NCATTTAGTG CTTATCAATT
 ATATTTAGTG CTTTCTATT AGCTTCATCC ATTTGATTAA GATAGCAACT TGTATTATTT AA

SEQ ID NO:1308: (Length of Sequence = 285 Nucleotides)

CGCGGCCAA CGTGGTCTC CTCTACATGC TCTGCAGGGA TGTATCTCC TCCGAGGTGG GCTCGGATCA CGAGCTCCAG
 GCGTCTCTG TGACATGCCT GTACCTNTCC TACTCTTACA TGGGCAACGA GATCTCTAC CGCTCAAGC CCTTCTGGT
 GGAGAGCTG AAGGAGGCCT TTTGGACCN TTGCTCTCT GTCATCAACC TCATGAGCTC AAAGATGCTG CAGATAAATG
 CCGACCCACA CTACTTACA CAGGTCTTCT CCGACCTGAA GAAG

SEQ ID NO:1309: (Length of Sequence = 319 Nucleotides)

TTTCCAATTA TTATTTTGGC AATATCCTCA ACTCTTTTGC CCACCTTINAT CTTCCATTCA ACCCTCCCTG CAAAATCCTG
 ATCTAAAAGC AACCCAAGTA TTGCTCTT CAACCTOCCA GCTGCTGAGT GGTTTTGGGA ATTACACAAC CACTAAGCTT
 GGTGCAGATG CACTATGGCC TCAATAGAGT CCCCAGTGC TGCCCACTTT CTCTTCCAT ATTTCTCCAC AGCAGCTGGT
 CAAAATACAT TTTTCCCAA ATGTCTTACA CAACCCCTT CTCTCTTATC ATCCTTANCT CACCCCCACC CCAGTTCTT

SEQ ID NO:1310: (Length of Sequence = 356 Nucleotides)

TGAAGTTTGT CTCTGTGCGC CCAGTCIGGA GGGCAATGTG CGATTTCAGC TCACTGCAAC CTCTGCTCC CGGGTTCCAG
 CGATTCTCCT GCTCAGTAT CCAAGTAGC TGGGATAATA GGCATTGCA ACCATGCCCA GCTAATTTT GTAGTTTATG
 CAGAGACGGG GTTTCACCGT GTTGGTCAGG CTGGTCTTGA ATTCTGACC TCGTGAATCT CCGCCTCGG CCTCCCAAA
 TGCTGGGATC ACAGGCATGA GCCACGCAC CTGGCCCTAT ATCCTGCTTC CTATCTCTG GTTCATGGTG TATGGCTTTT
 ATTTATTTCA ACCTGCAGTT GTTGCAGAA CATCTG

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GACTTCTTAC AATGCAGCAG CAAGAGAAAA TNAGGAAGAA GCAAAAGCAG AAACCCCAG TAAACCCATC AGACTTCGTG
 AGACTTATTC ACTATCACTA GAATAGCATG GGAAAGACCA GCCCCCATAG GTCCACTACC TCTCCCTGGG TCCCTCCCAA
 AACATGTGGG AATTATGGGA GATACAATTC AAGTTAAGAT TTGAATGGGG ACACAGTCAA ACCATATCAT TCTGCCCTTG
 GCCCCCT

SEQ ID NO:1298: (Length of Sequence = 263 Nucleotides)

CATTGCACTC CAGCCTGGGC AACAGAGCA AAACCTCCATA TCAAAAAAAA AAAAAAAAAA GAATTGCTGA CCTTTATGTG
 TTTCGTGTTA AGTTCACAAC AGTCATAATT CIGTAAATA CAAGGCAAAA CIGTAGTTTC TGATACTAGT AATATATCTA
 ANTCACTAAG TAAAAAGGAT GTGTAAATC TTAATAGGGG AAATAATTAT TGTATGANCA AGCAATTTC AATCAAAAG
 NCACGTTTCA GTATATATT TAG

SEQ ID NO:1299: (Length of Sequence = 272 Nucleotides)

ATCTNATTGT TGTGTAGTTT ATGGCAGTGG TCTCCAGACT TTTTGGCACT AGGGACCACT TTAATGGGAG ATAATTTTCC
 CATGGACGAG GGGATGGGGA GGAGGCAGGG GTGGTTTCTG GATGAAACTN TTCCACCTCA GAAGATCATC AGGCATTAGT
 TTCTCATAAG GAGGCAAAAC CTAGATCCCT TGCATGCACA GTTCACAATG GCACTCGTCG CATATNCCGT CGACAACCCCT
 TTTTGTAGGT TCCATGCTTC CCATTGGCT TT

SEQ ID NO:1300: (Length of Sequence = 277 Nucleotides)

ACCACGAC TCCAGCCTGG GTGACAAGAG TGAACCTCCA TCTTAAAAA AATGTGTAAA ATGAAGATTA TCATACTACC
 TACATCATAG AATTGTTTTT AGTGTAAAT GTGTGTGTGT ACATTTATGT AATAGTTAAC ATTTAAAGAG CACCTACTTT
 GTGTAAACAT ACTTTGTATG AGATACTGTT CAAATATATA TNCTAATATA TGCAACATAT TATATATGTN AGAATAGGGT
 CTTATATATC TTAGGAAGTT AGATCTTATA TGTTTGA

SEQ ID NO:1301: (Length of Sequence = 304 Nucleotides)

GGTGTGGGGT TATGTAAATC CCAAACTTAT GAACAGGAAA TGTGTACAGT GCATGATAGG TTAATTTTIN CTTTATGTGT
 GTCCAACGCA GGTCTTTTGG AGAGAAAAA AGATCACAGT GCTGACCAGG TAACTCAATA GGTTAAGTCA AGGTAACCAT
 TGAAAGATAA TAGGATTAGG GAGGTGTTA TTTTATGGCA TCTTCTCTCA TGGAGTTCTT AGCACTTCGG ACAATTTGTC
 TTTTCCCCAC TTTGTACAGC TGTTATGTGT CATTACCAG CCGGCTGTAT TTAACITGCC TACT

SEQ ID NO:1302: (Length of Sequence = 335 Nucleotides)

AGTTTATGTC CATAAGAAA ACATTTTATA AAATAATATG GTAGACTTCT ACTTCAACAT ATTCACGTAA AAACATCACA
 GTGCAAGAAA GTGATCACA TTAAGCATGA AGACATCAAA AGCCAGCCAG TATTTTAACT ACAGAGCAGA ATATTCTTGC
 TGTCCCTTCC TAGAAAATGT TGGCACATTC ATTAACTGCT CAGGTTACAA AAATCACTTC GTGTCCACTT CCGTCCCTTC
 AATATATTIN CATACTACA CTGTGTTACA TTAATGCTGG TGGACAAATT AGCTCCTATA AAATCTAAAA ACCTTTTCAG
 GTGGGCACAA TGGTT

SEQ ID NO:1303: (Length of Sequence = 316 Nucleotides)

TGGAGCTGTA TATGGTCCGG AGTTATATGC AGCATCCAGC TTTCAAGCAG ATGINTCCCT AGGCAATGAT GCAGCAGTGC
 CCCTATCAGG AAGAGGGGGT ATCAACACTT ACATTCCCTT AATCATTCCT GGCTTCCCTT ACCCTACTGC AGCCACCAG
 GCAGCCGCTT TCAGAGGAGC CCATTINAGG GGCAGAGGGC GGACAGTATA TGGTGCACTC CGAGCGGTAC CTCCAACAGC
 CATCCCGCC TATCCAGGTG TGGTTTACCA GGAAGGATT TTACGGTTGN TGACCTCTAT ATAGATTCTG CAAACT

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TGTATAGCTG CCAGACCAGA CCCAGATAGA CCATAATAAA ATAAAATACA CAGTCAGTTT TTAATGCAAG CCAGAATGAC
TCINCTGTAT CTTTAGCCIT TOCAGGGGA TACAGTGAAC TCAGATATCC CTGCTTA

SEQ ID NO:1291: (Length of Sequence = 317 Nucleotides)

CTATAATCCC AGAATTGAG GAGGCCGAGG TGGGCGGTC ACCTGAGGTC AGGAGTTGAG ACCAGTCTGG CCAACATGAT
GGAACCCCAT CTNTACAAA ATAAAAGCA AGATATGCAA AATAATGTGC CAGINTGGTG CGTATACCT TTAGTCCAG
TTACTAAGGA AGCAGGGTGT CTNAAACAGA AGAATCACCT GAGCCAGGG AGGTGAGGC TGGCTAAAA TAGATCTGGG
GGTAGTGGTT AATNGGCCCT TGTGAATNAT TCAGCATAAG GAACTGTCCA ATATTTTTTT AAGCTGTGAG AAAATCC

SEQ ID NO:1292: (Length of Sequence = 293 Nucleotides)

GAAGATGGAA ATAGACCACC ATACAAACA AAAAAGACAG AAGAGAATAT TAGCACTCTG TTGCAAAGGA GAATAGGTAT
GCTCAACTGG TAAGTAGAAT GCAAATATTC CAATATCTGA AAAAAATCCC AAATCCAAAA TACTTCTGGT TCCATGCATT
TTINCTAAGG GATACTCAAC AGGTATTTTA AAAGATCAAA ATACAGATCA GAGAATATGG ATACTTGAAG ATTATGAGCA
AACGAGGATT AAGGNAACA TGTTGGAGGA CTITTTAAAA ATGTGTTAAA GGG

SEQ ID NO:1293: (Length of Sequence = 310 Nucleotides)

TCCAGAAAC ATTACGGTTT GATATCAAGT TCCTATTTTA AGAGTCACCC ATTTGCCAC CATAAGTNC TGGAGAAGGT
AGGGTATTAC AGGACTAACC TTCCAGTGGC TGATTCTGGT GGTTCCACA TTCAGGTTTC TCTGATTTN ACAAGCTTTT
TCCATAAAG ACTGCATTIN CTTTAAAGC TTCTCTGCA AAANAGCCAT AAATTGAAGC ACCAGTGAAG ACAATAAAGT
AACATACAGA CGTTTCATT GGGAGGGGGC CCNGAATGNG AGACAAATAA GTCCCTAGTA AATGGCATT

SEQ ID NO:1294: (Length of Sequence = 275 Nucleotides)

GAATGACGAT GTCAGGGCA TCAGGAAAG TAAGGGCGG GAAACCGGC CCTTGGAGAA CCTGCCCAG GGGAGGCCA
GCCTACTCAC AGGNTCCGAC ACTCCAGGCA GAGCAGAGG CAGGAGAGGC CCAAAGAGCT AGGTCAAGCA GCTGGCTCC
CTGGGGTTAA ATACATGGGT TTTGTTTTA CTGCTGTGCT TGATATACAT GAAGTAATGA ATACCAAGCA ATTCATTTT
CCIGCATCTT TACTTTTACA TTGTINCTTA GGTGCTCTAA AACATTNAA ATACAATAAA ATGAGTGTAG CAAAAATTAT
TGAAGCT

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CAACCTCTGC CTCCGAGTT CAAGCGATT TCCTGCCTCC CGAGTAGGTG GGATTACAGG CATGATCCAT CAGCCCCAAC
TAATTTTTTA TTTTAGTAG AGATGGGGT TCTCCGTTT GGTGAGGCTG GTCTGAGCT CTGACCTCA GTTGATTAC
CCACCTCGGC CTCCAAAGT NTGGGATTA CAGGTGTGAG CCACCGGCC AGGCTACTGG TCTCAATTCT TTTGGATACC
CAGAAGCAGA AATGCTGGGA TCACATGGTA GTCTC

SEQ ID NO:1296: (Length of Sequence = 247 Nucleotides)

GGAAGGAACA ATTGATAAGA ACCGGGACA TCAGGGAGAG AGAGTATTG AGCTGGGCTT GATTCCATCG GGTAGTATCT
GGAAAAAAA AAAAAATCC CAGATGAAG AATGTACAA GACATGAGCA TGAGGGCAC ACTTTGGAAA ATGGNGAAG
TCTGACAGGC CTGGGAGAAT GAAGACAAGT TAGCACCAGN TTNAGAAGGC CTTGATTACA NGGCCAAAC TTTGGATT
TACACTA

SEQ ID NO:1297: (Length of Sequence = 246 Nucleotides)

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TTTTTTCACA AGGIGAAAGA CCTTTATGGA CATGACAGAG AGGACCTGAG TTAAGAGGGA AAATACATCT NCATAGCTAG
 GTTCACATTC AGTTATGTTA GTCCCAAACC TACAAATTCA ACATGATCCC TATTAAAATC CTACCAATAT AGTTCAAAAG
 CTTGACAAGT TGATTGTINAC ATTTATATGA GAGANTAAIT AAAAAAAAAA AAAATAGGGC CAGGTGCAGT GGCTCAGCC
 TGTATCCCA GCACITTAGG AGGCCAAGGC GGACAGATCA CTT

SEQ ID NO:1285: (Length of Sequence = 341 Nucleotides)

CATTCTNATG ATGTAGAGGC CAAAATGGTA TTINATAAAG AGGAAATTAC TTCTGANCCA CCCCAGCTGG AAACACTGGT
 AGTATCGGCA GCAGATGTGA TTACATCCGT TTTGGTATTA CACATCGTAT TTACAGCAGA CATGACTGAN CTGGGAACAC
 TGCCCTGTGA GACAGCCTGA AAGTTTTTIN CAGATTTINT GTGAACACTG TCTGAATTCA CATTGGGCAA AATGATTCTN
 CCAGTTTCTC CGGCTTCTGC TAGTTTGAGG CAATCTGTTT TATGTGCCCC AGCTGAAGAT CTTTCACTAA CTCGATCTTT
 AGAAGCTAAC TGCATTGCTG G

SEQ ID NO:1286: (Length of Sequence = 354 Nucleotides)

GCCCTATTTG TACAAAGTGT GCATGINAGC GTGCGTGTGT GINTGTGATT TTTCCTCCCTT TAGGTGGTTC AAATTTGGAA
 TTTGTGAAGG CAGAGCTGAT AATTAGAGAC AATAAAAATC TGCAGAGTAG ATGGTTCAC AAACAAGACT ATGAAAGAGG
 GGATAAAGA AGAGGTCAAG AAAGACTCAA GAACAGTATA TAGAATAAT TCAATTACAT TATGTGTATT TTAAGAAAAA
 CATGTTCAA CTGCATGAGA CAGAAAATAG CACTCNGTTA TCCTCCTAGA CTTCTNAAAG TTTTGAGTTT GTCTGCAATC
 TCTTCCATT AATCGNCTTT TGCCATCTTC AGAA

SEQ ID NO:1287: (Length of Sequence = 354 Nucleotides)

CTCTCTCACC CGGTGGCCTA TAGCCCCCAA CGTGGTCAGC AGCTGCCTCA GCCATCCCAG CAGCCTGGTT TACAGCCCAT
 GATGCCTAAC CAGCAGCAGG CGGCTTACCA AGGCATGATT GGGGTCCAGC AGCCACAGAA CCAGGGCCTG CTCAGCAGCC
 AGAGGAGCTG CATGGGGGGC CAGATGCAAG GCTTGGTGGT TCAGTACACT CCACTGCCTT CTTACCAAGT TCCAGTGGGT
 AGTGACTCGC AAAATGTGGT CCAGCCGCTT TCCAGCAAC CCATCTGGT CCCTGTGAGC CAGTNTGTG AAGGAGGCCT
 NCCAGCAGCG GGGGGTACCA GTGTACTATA GCAT

SEQ ID NO:1288: (Length of Sequence = 231 Nucleotides)

TTTACTTAAT TGGTATAGAT TGAGGNTCAT GCATCANCA GACGTTTGA AATTNTCCCC AAGTGATTCT NACCTGCAGC
 CTGGGTAAAG AGTCGCAGG CTCTGGATA GTCAITTAAGT GAAGTGTGGT AAGCACTGAT GTAGCAGGAT TACCTGCCCT
 ACTAGGTGCC GGAAGTGCAT TTNCTGTCT ACAAGTAATT TTTTAAATG TATGCTCGCA TCCCTGCCTT G

SEQ ID NO:1289: (Length of Sequence = 329 Nucleotides)

GGACACTGTG AGGGGAAAGG ACAATTTTAA AATTCTTTT CAAGGAAAAA AAAGGTCTTT ATGCTTTGCC ATGAGGCCAC
 ATTACGCTGC TATTTAANCT TAATATCTTG AACCTAAAGA ATGCTGACTT TNCCTACATT TCCAGAGTTA GGCAGTATTC
 TACACTTAAA GACTACTACT ATTTINATAA AAGGTAATCT ATTCAAATTT CTTACAGAT TTCCCTTGCT GGGGATCAGT
 TAGTAAAGAA GGAGGAATTC CTCTTACCCA AGAGGAATTG CATTGCTTTA ATTTAGCAAT GTGAGGTAAG GCCTGCCNAG
 TGCCCAGGG

SEQ ID NO:1290: (Length of Sequence = 297 Nucleotides)

GGAGGCACAT GTGCAGCTTT GTTTCATGGG TAAATTGCAT GTTCTGGGG CTAATGTGGT TTCTTTTACA GAAAAAGTA
 TCAGAAATAA TCGGTAACT TTNCTACAT GGTCTTAACT CTTCTTCAGG AAATATCTAA CTGTGAAGTG CAATCCTTCT

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GGACTTGTAC CCTGGGTGGT GAGAAGACCC TGATTGGTTT TATTAGTGCA TTTCTGTAAG TNACTGGGAT AATCATGTTT
 AGTTCAGCAT TTTATGTGAG TTTCTGAAAG CNCTTTAATC AACTCCATAG ACAAGATTAT AGTGTGTCAC AGCAATAGGC
 ATGGGCCATG TCTGCACTGG AGGTAAAGTTG CAAGGTACAC CCACGGGTGA TTTATCACTC TTACAAAGAT GATAACTAAT
 GAAGACCGCA TCTAGAATGC TCTTACTGGA GATGGTTTAC AGAGCATTTT TAATCATCAT ACTTAGATTT ATATTAAATAT
 TTCTTTTCAA ACTAAATTAT TCCAAACTGT GCCC

SEQ ID NO:1279: (Length of Sequence = 347 Nucleotides)

CCACTTCAGT GCTTCTGTGT CCGAAAAGA TCTTTTGACG CATAGGGCCT AACTGTAATA CACTTAAAGG ATAAGTCTCC
 ACCCCAAGGT GAACATGGGT CATGTGTTAC ACGCACATTA GTTCATTATC CATGTGTGAG GACCTCCTTT GTGAACAGTC
 ACAGCTCCTC CTATAACCTG TTAAATATGT ATGTTTGATC AACCATTCA ACTTAAATNC TTGTCTTACC TCTCCTTCCC
 TCAAAGTGCC TGGCTATACT TCCCAGCCTG CGGGATGGCC ACCTTGCAGG ATGGAACCCCT TTGTAAGAAA TAAAGTCTCC
 TTTCCAAATG TACACATTGT ATGACTT

SEQ ID NO:1280: (Length of Sequence = 344 Nucleotides)

ATCCTTAGCA TGCCTGINTT ACTGAGACCA TAAACTTTTT TTTTTCCTT CTGCCTTCAC CCAGTGTGTG TTAAGTCTTG
 CTTGTTAAGC TCCCACACTT AAATGGCTGC TTGCAGAATT GCAAAGGGAC TAGGGAGAGA ACAAACAG ATATGCGAGT
 GGTGGTTGTT AACCAGACAG GATTCTAAG GAGGGTTCAG GCAGTCAAGT GGTTTTNTGT ATGTTTTTTA TGTTCATAGT
 TTTGAGTTTT ACAATGTGTG AAGCTTACTT TTGCTAGCAT TAGGTATAGT TTAFTTTGAA AGAATGAGGC TCCTGAAAT
 AAACATGCC AGTAACTAT ATCT

SEQ ID NO:1281: (Length of Sequence = 331 Nucleotides)

TGAGGAACAT AAAATGGCTT GGTAAAAGTA ATAAATCAG TACAATCACT AACTTTCCTT TGTACATAAT ATTTGTCAGT
 ATAGATGAAT ATTACTAATC AGTTTGATTA TNCACAGAG GTGCTGCTCT TTAATGAAA TGAAATATAT AGCTAATGTT
 TTTCCCTCAA ACTCTGCTTT CTGTAACCA TCACTGTTTT AATGTTTGTG TGTCCTTCAT AAAATTTAAA TACAATTCGN
 TATCTGTTTT CCAATGTTAG TATGTATGTA AACATGNTAG TACAGCCATT TTTTTCATAT GTGGAGTAAA AATAAAATTA
 GTATTTTTAA A

SEQ ID NO:1282: (Length of Sequence = 310 Nucleotides)

CCATGTCAA TGTAGTTTAC AAAGGGAAAG GACAAGTACC TTNTATAGA ATATACAGAC ACAGCATCAC ACCACAGGGC
 CCACGGGAGG GTCGGGGAGA CGACACTTTT TCCCTGGGAA AGGCAGCTCT AATCCCAGGA ATGGTTCTCN GCAGAGGCTG
 GGTGGCCAGG AGCACTGTCC TCTAGCCCC TAACTCAGCC TCTGCTTCAN CTCGGTTCCT ATTTCCCTGCC TCTACCCCC
 AACTCCTTAT AAAGAGCCCC ATGAGCTAAG ACTAAGGAGA GGTTCATNTC CCTTGGGGCG TGTGCCCCAT

SEQ ID NO:1283: (Length of Sequence = 323 Nucleotides)

ATGAGGATTA ATTATATCTG TNCACCCAC ACAGCTCCCC CATACCATA ATCTTTATTT ATTTNCTTGG TTTCTTCTT
 ATACCTTGT TCAGGCATTA AACCATACC TGTATTATTT NCTATCCTTT TCAAAACAGG TGTGGACCAT GCACAGATGA
 CCTATGACGG GCAGCACTGG CAGCCACGG AAGCCTGCTT TMTTGTGCC CAGTGTAAAG CCTCTTTMTT GGGATGTCCC
 TTCTTCCCA AACAGGGTCA GATTACTGTC TCAAAACGT CGAGTCTTTG GGTGAAGACG TCATGTCCT CTGAATCTCT
 CCG

SEQ ID NO:1284: (Length of Sequence = 283 Nucleotides)

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GTTTTAGATA TTTTAAGATA TTAACTGTC CCTGTGGCT TTTAAGGAAA AAATAAGTAT AAATNCTTGA ATATTAAGAN
 TTTTAAATCA GCTAAATTCA GGGCCAAGAA CTATTTAAGA TGATTCANTG AGAAAGAAAA GGACCTAACC TGGAAAAAGA
 GTTTCAAATA TGCCAGTACG TAGGGTATTT NTGGAAATAC ACAGTCTAAA ATTAAAAATT NNAACTNATC AATGGAATTT
 AAATCTATAG CACTTTAAGG CTGTGGAGCC CAACANTAGG GGNACTTTG GGGGCACATG ATCTTTCAA ACATAAATTA
 GGG

SEQ ID NO:1273: (Length of Sequence = 368 Nucleotides)

GCAGCCTGGG CAACAAAGCG AAACCTGAC TCAAAAAAAA AAAAAAAA AAAGTCTCTT AATCACAACA GCAAAGCTCC
 AAAAGTTCAA GCATCACAGG TAGCTAGTGG CTACTATATA GGCNAGCACA GACACAGAAC GTTCCAACA TCACACACAG
 TTCTANTGGG TAGCAATGAC CTATACTGCT GACCATGCTG NCCAACATGT NTGCAGCAGT CCTCATCCC TCTGTNGTCC
 CCTGTTACAA GCTTAGANCC CCTCCNNAC GCTCCTCCCC CATAAACAGG GCAAGTNGGG CAGAAGGTGG AATCCTTTTC
 AGGGGGCAAA T

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GCAATGGGAT CTGGAGCCAA AGAAAAATAT ATCTGAGTTC TAGCTCCTCA CTAAGTAACT GTGTGATAAT GGGTATGTCA
 CTCACCTCTT TTAGCAGTTG GGTCTTTTAT GTGTAAAAGG GAAAAACATA TGCCTACATC ATAAGGCAGA TGTGAACATC
 AAATGTTATC AGTAACTGTC AATCTGTTTT ATTAATTGTA GAATGTCCAA AATATTAGTT TGTATGGACT TCAATGAGTA
 TGTFTGTGG AGTGGAGTGG GGGAAAGGGA TCATTGCTTA CCTCTGCAC ATATCATGTT TCAGCTAGT ACAAGGCAGC
 CATGAGCACA AAGGGCTAAG CTACTTAAAT CAGNCCCCAA ACAACTTC

SEQ ID NO:1275: (Length of Sequence = 319 Nucleotides)

AGATTACTCT TTGCAGAAIT TTGGTTAATT GTGAAGCTGA AATATCCTGA CTCTACCTCA AAGTTAATGT TTTAGGTAAC
 TGAACAGGTA TTCNCCCAT TACTAGTATT GAAGTCAGAA TACAGAAACA AATAGTTACT GCCAGAAGCA GAATGGAAGA
 GCCAAAAAGT ACACAAAATG GACGCCATAA ATNCTGAAAT AAAAGTGTAT GATGTGTCTT GAGTCACTGT AGAAGTCATG
 CATTTATTAT CAAGATAGAA AAGAGCAGAG AATGACGTGG GACATTGGTC CTGGAGGGC TTCGTANGTG GTTCGGTCC

SEQ ID NO:1276: (Length of Sequence = 324 Nucleotides)

CTGCATGGG CAGGACAAA CCTGCCAGAT TCAGAAGGTC ACGANTCATC TGGCCTTTAA TGCTGATATC CAGTGGAGAG
 CTGGAGTGGG GGCTTGGGA AATATTGACT TCCAGGACCC AGGGCTTGAG GTTTTCTCT AGCATGATGT CAAAACCAA
 GAGTTCATGG CAGCTATAGG GCGTCCGAC ATACATCTTG AGCAGGCTGG TCACATAGGG CTCTGACGAG ATGATAGTTT
 TGACAAAC ATCCTTTATC TTCTCCAGA TGGGTCGCT ATTGATTNCC CTTCTGGGCT CAGGTAGTTC CACAAAAGCC
 TTCA

SEQ ID NO:1277: (Length of Sequence = 388 Nucleotides)

AGCAAGGCGG TGGGGTAAGT NTGGACCTTT GTGTACCAGA GAGAACATCA TGGTGGCTTT CAAAGGGGTC TGGACTCAAG
 CTTTCTGGAA AGCAGTCACA GCGGAATTC TGGCCATGCT TATTTTININ CTCTCAGCC TGGGATCCAC CATCAACTGG
 GGTGGAACAG AAAAGCCTTT ACOGGTCGAC ATGGTTCTNA TCTCCCTTTG CTTTGGACTC AGCATTGCAA CCATGGTGCA
 GTGCTTTGGC CATATCAGCG GTGGCCACAT CAACCTGCA GTGACTTTGG CCATGGTGTG CACCAGGAAG ATCAGCATCG
 CCAAGTCTGT CTTCTACATC GCAGCCAGT GCTGGGGG CATCATTTAG AGCAGGAATC CTCTATCT

SEQ ID NO:1278: (Length of Sequence = 354 Nucleotides)

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CGGACAGATG TCACTCTCGC CCGAGAAGGG GGACACTGTG ATGGTGTCTT TAAGCTCATA GAGTGGCAGG TTGTCTGAAA
 TGCCACCATC CACGTAGGCG ACCCCCTGGA GGGAGGGAGG GATGAGCCCA CAGTACACGG GGATGAAACC NCTGCAGACA
 TTGGCCTGGA TGAGCTCGTC CTGGAGTTIN AAGTGGGATA TAATGACATT NTGGCCGTCT GACAGCGGGG TCAGGGGAGAT
 GCCCAGGCGC CCACTGGCAT GCTCATGGCT ATCAGCAGGC AGGACCTTNA GCAGGAAACT CGGGATGATC TTTTACCAGG
 TT

SEQ ID NO:1267: (Length of Sequence = 310 Nucleotides)

GTAACCCATC CCATAGGGTT GINCIATGTA TTCTTGCCAG GTGGGGTTGG AGCACCTTGT GAGCTCAGCA GCCCAACATC
 GATAGTAAGG GAGTCAGGT TTCTTCATCT TCCCTAGAGT TAGAACTCAC TTCTACAGCC ACTGTGTGAG GGACCACTTT
 GAGCGCCCTT GGCACCTGCT GGCTGGAAAT CAATTAGCT GTAATGGATC TGGCCAGCT TTTCTCTCT TGGGTATCT
 GCACTCATAG TGGTGAAGC AAGATCTACC AGATGGGGAC ATTGAGATGG TCCCTTCTC CTCTCATTT

SEQ ID NO:1268: (Length of Sequence = 338 Nucleotides)

GGGCTGCTCG TGAGGATGGG ACAGCATIGA CTTACTGGGG AGACTCCCTT GATGACAGCC TTACACGGIT ATTCATAAGG
 AGGCAGGAAG AGGCGCTAAC AGTAAGCATG TTCTGGGTGG TCTTCGGGTT GCACATGTGC AGCAGCTGTA CCGTCTGTCT
 TGTATGTTAC ATGCTCATTT AACATCTGAA ATCTCCACCC GGGAGTGTGT TTTTACTAT TATAATGAGC AAAGGTTGAG
 TCTGAGGACA GGTAAAATCA AAAATGTGCA CCTCTTACG GGGGAAATTC CTTACTGGAG CTAGTTTGGC TTGAAGNGAA
 CTGGACTACA GTGTGAAT

SEQ ID NO:1269: (Length of Sequence = 363 Nucleotides)

CTGCTAGAGA GTATTTGAGG GTCTGCAGCA TGTGTGTAAG GCCATTAGC ATATGTTAAG GCCATTAGA GCAGTAATTA
 TAAAGGGGCC CTGCTAAAAT AAATATCAAG TTCCCTTAAG AAACCTTCAA ATTATGAAAG TTTCAGGTCA TTATTTTGCT
 ACAATGANC TTAGCAGCTA AGNAAAATGT CTGCTGCTT ATAACTAAA TATGGTATAA TTATATATIN CTNTTATGTA
 TTTCTAAAGC TACATTTTCA CCTAATCTT ACTACAAAGT AGTTTCGGGA AACAAAGTAA AAGCAGGGGN AATCCAACCT
 CAAATATAAT CAAATATAT

339

GATAAGTGAG ACTAATGGAA TCGTTTCCCT CTAACCTCAT AAAAAGTTTA AGGATTATCT TTCTTGAGTT CTCTGTATTT
 CTGTTTITAGA AGAAAAGAAC AAAATTTGAG AAACAAGATT ATAGTGCTTT TNCIAAAGTA TAAATACGTG GGCCCTATAC
 AAAGTGGCAA ATTCATTAGT CTAAAGCAG ACATCCAAGC TATGTGGGT GTTTGGATGA CACCATTTTC ACAGTAGGAA
 ATCATTTTAT TCTGAGCGTG GGAATCGGCA TTGGTTAAG CATGAGGTTT TATGTGGTAT AAACACCTGG GAAGTGAGAG
 AAAAGNCAGC ACAGAAGCTC TGTGGGAGCT CTTCTGAGCA TTG

SEQ ID NO:1271: (Length of Sequence = 335 Nucleotides)

ATGCCCTGCG CTGTGTTGAC TGCAAAAGGT GATGTGCAGG GGTAGAGGTA GGGTACTAAT TTACAGTCAC CAAAATTAGT
 ACTGATATTA ATCAGTTTAG TTGGATTAAG ATGAACAATG TTTAATGCTT TAAGGTCAT TTTTGGCCCC AACAGGACTG
 TGCTATATTA AATGACACCG TGCCCAAAG CTCAAAAATT ACATAGAAAG TAAAGTACTT CTTGAATACT AAAACAGTTA
 AGCATAAAAG GTTGTGAATT GGTCCCAAAG TGATATTAAC TTAAACATTT AATCCTACGN NCTATCTTAG CTGTACCTC
 TAAAAATGCT TAGGA

SEQ ID NO:1272: (Length of Sequence = 323 Nucleotides)

312

TGCTCTTGGC TGGGAGCTCG CTTCCCAGCC TGTAGGATGG CCACCTTGAA GGCTGTAACC CTTTGAAGA AATAAAGTCT
CCTTTTCTAA ATTTATAGAT TGTATGATTG TTITAAGCTA ACAATAGCAA TGGCATTATC ACCTCACTTT CTGTGTGTGT
GCTTAGCATA GTACCTGACA CATGGCACTT GAGTTGGTAG CTATTTTTTA ATAT

SEQ ID NO:1260: (Length of Sequence = 353 Nucleotides)

CTCAGTCAAA AATAGCAGCT GCTGAATTAG CATGGGCATA CCAGGCAAAT AAGCCTGCAT TGTATAGCG TTCCCTTGAT
TGCNCTATGA AACTGAGTAA AGTTTCATTT CCTGATTCAA GAATTGCAGC TAAAATATCC TCTGGACAAA GAAGAAGGGA
AATTTTTTGA TAACAGATGT GTTGACTCCT TACAGTATAA AGCCAATTTT TGTATATCT CACCAACAAT CCTGGTTTCT
ACAGTACATC AATTTTAAGT AATGTGCCAA ATCATGGCAG CAAAATATG TTCCCTCTAG CTGTAGGGA CTTTGACTTG
NAAAACAGGN GTTCAAATC ATCTCTTCA TTT

SEQ ID NO:1261: (Length of Sequence = 294 Nucleotides)

TTAAAACAGA CAGCTAAGAT TATAGGAATA TTTTAAATAA ACAGCATTTA TTTTAGACAC ATTTCAAATA GAAGCCACAA
TAATCAAATA GATATTATCT GAAAACGTTT CAAAATATTT AACCCCTTAA ATGTTCTTCT CTGAAAAATT AGTTTATCTT
TAACAAATTA TTCTGAATTA TTGTGCAAC ATATAAGGTT ATGCATATAT ATNCACTTGC TGGTCTCTAT GTTAAAGCAA
ACTAGGTAAA AACTAGAGGA AATATCTGGA NCATAAAATG GTTAAACAATT TACG

SEQ ID NO:1262: (Length of Sequence = 292 Nucleotides)

ATGATGAAGG GTTGGAGTGA TGCACCTAGA AGTGAAGGAA TGCCAATGGT TGCCAGCAAA GCACCAGAAA CTAGGGAGAA
ACAAGGAAGG ATTCTNCCAC AGTTTCAGAG GGAGAATGGC CCTGCCAACA CTGTGATTTT GGACTTCTGG CCTCCAAAAC
TATGAGACAA TAAATNCCGT TTGTCTTAGA CCACCCAGTT TGTGGAATTT TTTTACAGCA GAACTAGGNA ACAATACAG
TTTTTTTTTG CAGTAAAGAA GTTTTAAATC TGGGTTATGT CCAATGTATC AA

SEQ ID NO:1263: (Length of Sequence = 303 Nucleotides)

GGTTGAGGTT GTGGGTAGGA TGAGAAGACG ACAGGATGAA TCTTACCCCC CAGCTTTAGT GGAATCTGT GAAACACCTG
GGAATGTGTT AGCATCAGGA GAATTCCTCT AAGGTATGAA GAATGACAAC CTGGGACCTT TCTTGTAGGT GGCTCTGAAC
CTAACTATTC CCCAAGATT CCCAAGTGGT AGGAAGGAGG GGGTGCAGAG GGATATTAAT CATGGTCATT AAGTCTCAAA
ACATTTCTAC TTCAAGTGAA TACATTAACC ATGCTGAGGC AGTGAACAA CTGAATGCGT AGT

SEQ ID NO:1264: (Length of Sequence = 313 Nucleotides)

GGGACTACAT CAAGCACCTG CGGACATCT GCGAGGGCTA CGTCCGGCAG TGCCGCAAGC GCGCAGACAT GTTCAGCGAG
GAGCAGCTGC GTACCATCTT CGGGAACATC GAGGACATCT ACCGCTGCCA GAAGGCCTTC GTGAAGGCCCT TGGAGCAGAG
GTTCAACCGC GAGCGCCAC ACCTGAGCGA GCTGGGTGCC TGCTTNCCTG AGCATCAAGC CGACTTNCAG ATCTACTCGG
AGTACTGCAA TAACCACCCC AACGCCTGCN TNGAGCTCTC CCGGCTTACC AAGCTCAGCA AGTACGTGTA CTT

SEQ ID NO:1265: (Length of Sequence = 290 Nucleotides)

TTTCTATGTG TAAGAGAAAA TAGAGATGGG TATACATACT GTTGTITTTT TTGAGCCGAG AAACGTGTGT ACCGGGGCCT
CAGGTGGTGG GCATGGGGG CTCTCTTGC AGATGCCCAT TGGCATCACC GTTGCAGCCA TTGGTGGCAG CGGGTACCG
TCCTTINTTG TTCAACATAG GGTAGGTGGC AGCCACGGGT CCAACTCGCT TGAGGCTGGG CCCTGGGCGC TCCATTTTNT
NTTCCAGGAG CATNTGGTTC TTTGGCGGA CCCACGCAGC CTTGAGGATT

SEQ ID NO:1266: (Length of Sequence = 322 Nucleotides)

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TTGCTTTCAA GACAACACTC AGTTGCTAAA CCCATTTCTT TTTCTTTAGG ATATTTTCAT TGTCTCCGAA TTTTAGAGCT
 GAAAAGTGCC TTAGAGATCA TCTAGTTCAA CCTCTCCGTT CAAATGGAGA ACCTGAGCCA CTAAGNTTCA CAGNGAGTA
 AGATAATTGA GCAACAACCT CCAAGTAATG ACAGAAAATT ATAGGAGAAT CAGTACAAAC TGTGAGAAAT TACTATGTTG
 TTAGCATCCT AAGTATGAGT TTAGAAAAGG TAGAAGTTAT AAGAAAAGTT AAATTGTTTT AATATGAATG GGATTCCTCT
 GTTACCTTCA NGNTAAAATG GAGACATACT TTTTNCCTTA GGTATTATAG TTAAACGAAT ATTGTATCCN GTG

SEQ ID NO:1254: (Length of Sequence = 377 Nucleotides)

CAAAAGCAAG GAGATGAGTT GAAAGACAGT TTTTNCCTTA GTCATCAGTA TGGGATGTCA GCAGAACAAA AATTAAAAAG
 ATTAATTINC CTTTTGATCT AAAACTTCCT TAGTTTGAGC AGTAGGTGCT ACAAATTTAT TTACATATCT TAGTATCATA
 GTTAAATGTA ATGTGTTTAG GAGAGGAAAA CAAAAGATAC ATTTCCTTTA AATTCATTAA GAAATTTTCA AATTCACCTT
 GTAGCCCATG CTGNATAGAA TTGGGCTGTG TTGTACATT TGAAACACTG TTTATGTGTC TTGAAACACT TATTINTTTA
 ATGCGCGATG TGATGATGCC TATGGCCGAG ATCANATATA GCTAGATTGG CTAGGCT

SEQ ID NO:1255: (Length of Sequence = 307 Nucleotides)

ACAAATGTTA GCTTTCTCTG GCCTAGAAAA AGAATAGGNT CATCAAGTCA TAAAACGAAG TATGINATTT CAGCACCTCC
 ACAAATGGC TTCATCAAAG AAGAGAATCC CATCACATGT TACCTCTCCT CTCTAGGTTC TTCAGCTGGG GCTTTGCCTG
 CCCCTCTACC TATGGCAGAA CCCACTGACT CGTGGNCTTT CCAGCACTTC CACTTGCCCTC CATTAGACAC TTAACCCCGC
 TGNCCGCTGC CTCATGCCAG GGAGGGCCAA TCTCCAGNCA ATGCTNCTGC TGGCTGTATG ATGACTG

SEQ ID NO:1256: (Length of Sequence = 326 Nucleotides)

TTGAGAAAC TGCAGAAGCT GGAAGGTCAA TCTCTGACCT TCTTTCTGTA GACACCTTCA TGTGACAGGT GTCCCACTTT
 ATGCTTGGAG GGAAGGAATG ATAACACAAA GATACCAAGA AGAATGTGAA GAGACCTTTC TCAGTTCCCC CCAGTTCAAG
 ACCATTATAT CGTACCCACT TTTGTCTAAT CANGCTTCTA TATGACTATC CATTCTTTAT CAAACTAAA CATAGAAATA
 TAGATTATC TCAATTTCTG TCTTTGNITC TGAAGGCTCC TGTGTACAT AAAACTTACA TTAAATAAAT TTGTATGCT
 CTCTTG

SEQ ID NO:1257: (Length of Sequence = 224 Nucleotides)

TTTTTTNAGA GGGATTCTCA CACAGTCACC CAGGCTGGAG TNCAGTGGCG TNATCTTGGT TCACTGCAAC CCCTGCCINC
 NGGTTTCAAG CGATTCTCCT GCCTCAACCT CTCGAGTAGC TGGGACTACA GGCACCTGCC ACCATGCCCA GCTGATTTTC
 CTGTTTTNAG TAGAGACGTT GGCCAGGCTG GTCTCTTAAC TCCTGACCTC AGGTGATCTG CCCG

SEQ ID NO:1258: (Length of Sequence = 329 Nucleotides)

CAGGGGTTTC TTTCCCTACC CTTGTGAAA ACCAATCAAT TACTAGATGA GTGGATGGAT GCAGAAAAAT CTGGGCTGAG
 CCAAAGTCCC TTTTGAAAT ACAAGCCATA ACAITOGAAG GACATCAGCG ACCTTGGCTT GTTTAGGTGA TTTTNCCTCC
 AGCTGCAGGT AGTCTTGACA AGGAGCGTTT AANCAGAAGG CTCAAGATGC ATTCTTGTG TAGGTGGGNG AGAGCACTTC
 TAATGTTAAG TGGGGTACAG NTCAGCTGCC CCCCCAGTA GCCTGGACAT CGTCTTINCC CCATTAATCCT TNNCATCCCT
 ACAAGGTCC

SEQ ID NO:1259: (Length of Sequence = 374 Nucleotides)

GGTCATATGT TACATGCATG TTGTINCAAT ATGTGTATGT CAGNCCATC TTCACAAATT TNCATAGCCC CTCTGTGAT
 CTGTAAATA GGTATAFTTA GCCAACCTC TCAGCATAAA GTCCTACCC CAGCTGCTCC CCCTTCCAAG TGCTGCATC

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GGTCTTGCCG GAGAAGTACC CCCCTCCAAC CGAACTTTTG GACCTGCAGC CCTTGCCCGT NTCTGCTCTG AGAAACAGTG
 CCTTTNAGAG TCTTTACCAA GATAAATTC CTTTCTTCAA TCCCATCCAG ACCCAGGTGT TTAACACTGT ATACAACAGT
 GACGACAAAG TGTTTGTGGG GGCCCCCAGG GGCAGCGGGA AGACTATTTG TGCAGAGTTT GCCATCCTGC GAATGCTNGC
 TGCAGAGCTC GGAGGGNCGC TGTGTGTACA TCACCCCAT GGAGGCCCTG GCAGAGCAAG GTATACATGG ACTGGTACGA
 GAAGTTNCAG GACAGGNTCA ACAAGAAGGT GGTACTNCTG GACAGNCGAG ACCAGCACAG ACCT

SEQ ID NO:1248: (Length of Sequence = 225 Nucleotides)

AATTTGGAGA AGATAGAAGT TTGAAGTGA AACTGGAAG ACAGAAGCAC GGAAGGCGA AGAAAAGAAT AGAGAAGATA
 GGGAAATTAG AAGATAAAAA CATACTTTTA GAAGAAAAAA GATAAATTTA AACCTGAAAA GTAGGAAGCA GAAGAAAAAA
 GACAAGCTAG GAAACAAAAA GCTAAGGCA AATGTACAA ACTTAGAAGA AAATTGGAAG ATAGA

SEQ ID NO:1249: (Length of Sequence = 393 Nucleotides)

CATCTATAGT CCATACATAT CTATAATGGA CAGAAATATG AGAATGAATA AGCAAAGATA CTTATGTACA CCAATAATAA
 AGTAAGAAAG GTAAAAAAT TCATGTAATA AGAAAAAATA ACAACCCAGA AATTTAAGAN TTAAGTAGTA GTCAAATCTA
 ATTGGAATAA CTCACCTATA TAAANACAA GAGGAAGGAA ACTTTATACA TAGGTCTGGA AAATATCACA ACTATGTCC
 CAGAAGANIG TTTATCTCCA CAGCATCCAA CCTAGTGTCA TGCACACAGT TGGGACTCAG CCCTGTGTGC CTGATTGATT
 ATGAAGNCAG TCACTGTGAT CAACCAACA GTAATTGAAC GTTCATTTTT AATANGGTCA GTGTAAATC TGT

SEQ ID NO:1250: (Length of Sequence = 391 Nucleotides)

CGTATGTATC TTINATTTAC ACTGCACACC TTGCAGCATC CTTACCTTGC AGAGTACTGA GTCCTGGCTT CATGAATTIN
 ATGTCAAGTA AATGGGTTTT AGTCATCCCT AGTTCATGTG CATGTCNCGA GAAAAAGGGG AGCTTCTAAA ACATGTGCGC
 AAACCACAGG AACAGTGCA ATCCTGTGTG TCTCTATTCC CACTTACTCC TCAAGGCCCC AAGGTAGGAC GCATGTTTGG
 TGGCTTTCTG GCTTACAAGT TCCAGTGCTT ACTCCCATTC CCTCAGAGGT TTGCTGTGAT CACTGAGGGG AAGCAGAATG
 GAGCATCGTG TGTCTCTTAC TGGAGGACTC CTTCAGCAC CTGAAACAAC CCAATGTTGT TAGAGGCAAA T

SEQ ID NO:1251: (Length of Sequence = 320 Nucleotides)

GCCTCANAAG GTCCTTCCCA GGCTTCTCGC AAAGGAAGGC ACTGCCTCTN CACACCTTGT GAAACCTTTC CAGGACCTCC
 CAGTCAGAGG CCGTCTGGTT CTCACGTCTT GCAGAGCGCC CTACAGCCTG TCTGTGGGTG AGCGTGTCTG TNAACTCTTG
 TCCATCTCTT CTGTGATCTG TGTGCTCCTC GAAATAACTG ATTTTNTCTC ATACACCTTG GAATCCTGAG TCCACAGAAC
 AGAGGCTCAT ACAAAGGAAG CTTTCAAAGA GTGCTCATCG ATTTCTAGGN TTCTTGAAGA CAGGCACCAN GTTTGTCTT

SEQ ID NO:1252: (Length of Sequence = 367 Nucleotides)

CAAAAAACA AAACAGTTA TGCAAAAA AGAGTACAAA ATGCCCTTIT CTGAAGCTCA GTTTGAGAAA CTGATTTTCN
 ATCTAGCTTA TTGATTATAC TCAGTTTCAA TTCTCCCTGT GCAAATAATA CATAAAGTCA TTAATGATGA TTTGATGANC
 TGAAATCATC TTGCTTAGG ATCGTTTGAC ATCATAACCC AAATATAAAA AAGTTATTCA AGATTACAG AGATAAACA
 GTGCCTCGGA AACATAATTC ACCCATGTAT ATATAATANT TTNGAACAT ACTTTTAAA CATAAATCA CAGTCAAGGC
 AGTGATAGCA TTGCATACTC AGTGCAATTAT TTCATGTAGT GCCTTCC

SEQ ID NO:1253: (Length of Sequence = 393 Nucleotides)

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SEQ ID NO:1241: (Length of Sequence = 350 Nucleotides)

GGGGAGGCGG TAGGGTCTGC NCTGTCTGTN AGGGGCTTGT GGCTTGGCGG GTGGGCTTTG CATGGTCTCG CCTCTTGAGT
CCAGCCCCGT CCTGATGGGG CAGACTTCTG TNCGTNCTGC TTCTGGGGTG ATGTCAATAC TGAATGAGAG GGCAAGAGAA
GGGGAAGGG AACCGCCCAT ATGTNCTTCA CGTGCTGCAA GGGGCTGTN TGGTTCCCAT GAAATGGTCA GCAGAGACTT
TGGGATGGGT ATGACTCGTG GGTACAGGG TTGACTAGAC AGAATCTAAA GAAGGTGGGT GCTTAGCTNG GAAGTCTTCA
GTAGGAACGG ATCACTGTGA AGCTCTAGGG

SEQ ID NO:1242: (Length of Sequence = 392 Nucleotides)

CTCTTACGAG TGAGGTTAAG TATTGAACAG ATATTTAAAA GCTATAAGCT TTAAACAGA ATAGGCATAT TGCTGATACC
AGTATTTGAC AACCGCCTTG TTTTTCAGA TAAGAAACT GAAGCACAGA GACCATAAGG CATCAGCCTA TGGTCATTCA
CTTCGTGGTA GTCAGGTGG AGGTACACACC AAGGCCCTCT GGCTACTGAT AATCTCTGTA CTAGGCTGCT TTTAGTAAA
CTCTTGAATG AATGAAAGAA AGAACACATA CTGTTGACTT TTGAAGTTGA ATCTAAACAA AACCTATGTT GAACCTTAAAG
TCTGTAATCT AAGAACTATC AAACCTAAAC TTGTTACAAA AGGNGGTGAT GAGCACACC ACTTCTTTTT GG

SEQ ID NO:1243: (Length of Sequence = 377 Nucleotides)

GTGGGGCAGG CGTGAGGTAG GGGTGGGGTG GGGATGACAG TCAACACAGC TTGGACCAGA AGCCCATGGC GCCTGGNTCC
CTGGAAGGC ACAGGGCACA GACGGATGCC GCCTTTINTG CTGGGACACT CCTGCCACCA TCCACAGCTC CCGGTCCT
CCACGTCTT GTACTTGGTG AACAGGTGT AAAGAACCCT CAGGTGGAT TTNAGGTCCA AGTTAACCAC GTCTTCAGGA
CGAGCCTTGG GTTNTTINAG GCCTCGTCC AGCATCAGCT CAAAGGCGAA GGACACATIN TGGACCTTCT GATCGAAGCT
TTCGGAGTC AGGTAGAAGT GGTGGAGAGG AACAAAGTAG TCTCCAGAA GGCCCAT

SEQ ID NO:1244: (Length of Sequence = 312 Nucleotides)

ATTTTTCAT CAATGTTTAT CAAGGATATT GGCTATAAAT NCTCTTTTTC AGTTGGGTCT CTGCCAGGCT TTGGTATCAG
GATGATGCTG GCCTCATAAA ATGAGTTAGG GAGGATTCCT TCTTTTNTCTA TTGATTGGAA TAGTTTCAGA AGGAATGGTA
CCAGCTCCTC CTGTACCTC TGGTAGAATT CGCTGTGAA TCCATCTGGT CTTGGACTTT TTTTCTGTTG GTAAGCTATT
GATTATTGCC TCAATTTTAT AGCCTGTGT AGGTCTATTC AGAGATTCAA CTCTTCCTG TTTTAGTCTT GG

SEQ ID NO:1245: (Length of Sequence = 320 Nucleotides)

GGAGATCGTG CACATCCAGG CCGGCCAGTG CGCAACCAG ATCGGGGCCA AGTTCTGGGA AGTCATCAGT GATGAGCATG
GCATCGACCC CAGCGGCAAC TACGTGGGCG ACTCGGACTT GCAGCTGGAG CGGATCAGCG TCTACTACAA CGAGGCCTCT
TCTCACAAGT ACGTGCCTCG AGCCATCTG GTGGACCTGG AACCOCGAAC CATGGACAGT GTCCGCTCAG GGGCCTTTGG
ACATCTCTTC AGGCCTGACA ATTTATCTT TGGTCAGAGT NGGGCCGCA ACAACTGGGC CAAGGGTCAC TACACGGAGG

SEQ ID NO:1246: (Length of Sequence = 275 Nucleotides)

TTTTTTTTTT TTTTTTTTTT ATCTGACAGC AATAGATTTA TTAAGTATCC CCGAAAATAT AAACACAAAC CAGTAAAAAA
CAAAACCGTA AAACGTCAGG CCTGGAGCTG CAATAAGACA GAGACAGGAG CAGCTCACAC GTGGCCTAGG TGGGGAGGAC
GAGGCCATAA ATACTGCAGG AGGGCGGCAA GGGAGCCCTA GGGCGAGGGG AAAGCAGGGT NTCGGCAGCG AGATGGCTCC
GGGGGTTTAG ACACTGCTGG CTTCGGCCCC GGCCG

SEQ ID NO:1247: (Length of Sequence = 384 Nucleotides)

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CTCTCTCAGC ACAGCCTGGG GAGGGGGTCA TTGTNCTCCT CGTCCATCAG GGATCTCAGA GGCTCAGAGA CTGCAAGCTG
 CTTGCCCAAG TCACACAGCT AGTGAAGACC AGAGCAGTTT CATCTGGTTG TGA CTCTAAG CTCAGTGCTC TCTCCACTAC
 CCCACACCAG CCTTGGTGCC ACCAAAAGTG CTCCCCAAAA GGAAGGAGAA TGGCAGCCTC CACATCTCGG GTTCAAGTGA
 TTATCCTGCC TCAGCCTCCA AGTAGCTGGG ATTGCAGGTG TGCACCACCA TGCCTGGGTA ATTTTGTAT TTTTAGTAGA
 CACGGTTTCA CCATGTTGGC CAGGCTGGTC TGGAACTTCT GAGTGTAAT GATCTGCCCA CCTTTG

SEQ ID NO:1236: (Length of Sequence = 401 Nucleotides)

AGGATGTACT TCTAGTAATG TCACTGAAAG CAGATATCAA AATTCATTAC CAGGAGTACT TTGCTGTIGA ATGGTTCCTG
 TGCCATACAG AGATAAGATG GAGTCTTTGG AAAGTTGTTT CTTTGCCACT TCTTCTGATT TINTAGTTTG CTCAGTGAAT
 AAATCTAGAT CCCAGATGT TACTGTAGAC AGGGTTGCAG CTGCTGGTGC AGAGGGTGTG CCTTGAGACA AACACCAAAA
 TAAGCTATCA AATTCTGCAT AGTAAAGCGC ANTAAATCCA TTACTTAAAA TCCAAATAAA GTTATAAAAT TAGATAGGAA
 TCAAACAATT GTAGAAGGTA AAATGGTGCC ATTCAAGAGG ATCACTTACA AGCCAGCCC ATATAAAACC ATCTACAATC
 A

SEQ ID NO:1237: (Length of Sequence = 372 Nucleotides)

TTAACTCTTT CINTCTTCA GTCGGATTAT AGAGTTGGAG CAAATGTCAT GATGANCITT NAGGCCTAGG CCTGNGCTCT
 TGAGGTGTGT GTG:GTGTGT GTGTGTGTGT GTGTGTGTGT TTCTTTCTCC ATAATAGTCC CAACCCATAA CAGGGGTATG
 GCACAGTACT TCTTATGAAC AAAAGTGCTA TTGGTCTACA AGGGGACTTG AGCCTGCACT AATTGTATTT GATTAGGATT
 TTGTGCTGT CTGTATGATG TTTAACCACA CIGTCAATTA CAGACTTCCT TTAAGGAATT TCCAGGAAAC CCCCTTACCA
 TAAGAGTTTA AATTAATAGT TTNCTAGTTT AATGACAGCA GTTGGTAAAG GA

SEQ ID NO:1238: (Length of Sequence = 304 Nucleotides)

GGACAAATT CCAATTATG TAAATGTAAA AGAAAAGACA ACAAATAA GCTAGAAAGA TGAAAGCTAA AAATCTATT
 TGAATATGT AAGATGATGA CAGATATTAA ACAGTAATTA GTATGAAAC AATCAITTA ATGCTTTTNC CAGGGGAACT
 GCAGAAGTTG AGACCTCAA AGAGCATGCA AGCTAGTAGG GAGGCTGCGA CTCATACCTT TGAATCTTTC TGTTCTGCAA
 ATTCTCAACT CTTACCAATT TAACTCTGCA GTACTGCTAT GGAAATTACA TAAGAGTAAA TTGG

SEQ ID NO:1239: (Length of Sequence = 389 Nucleotides)

TGTTATAACT GGCACTTTAA TTGTMTTITG GAACTAGAAT TTAGGGGCAG TTGGATGAAA TTGCAAAATT AGAAGGGGAA
 TAAGAATTTT CTAGTGCTAT ATAAAGAAAT GATGATGGAG ACAAAGCCT TGCTTTCTC TTTTTAGAAT TTATTNCGA
 TTTINAGCAT ACTGTGGGGC TTTTAGAGCT AATATGATCT AAATNCAGAA AATTTAATTT TCATAGTAGG CCAGGTGTGA
 ATTACTATG TTGCTATAG AATGCTTATT TAGACTAACA ATAAATTTAC TTGCTTTCT AAGGCCAGTC AGCGAATGTG
 GGGATGAGGC AGGATGTTTT AAATGAGCCA GAGATGATCC NCAAGGGGAA CAGTCGACAC AGAGGTCTT

SEQ ID NO:1240: (Length of Sequence = 365 Nucleotides)

CTCCAGCCTG GGCAGACAGAG CAAGACTCG TCTCAAAAA AAAAGCCTTC CTTGCCAGGT GAAAGCAAGA GTGGTATGGA
 ACATTATTTT AAACATAAGA AGCAGAAGGT TCTCCTCTT GCAAGTATGT TTTCTTAAA TGTAGCATTT CCACTGGAGG
 AGGTGGTCTG GGTGGATGGT TAATATGTGA GGATTGTNCA GCCAGGCAGA TAACCAGGCC TCTGCATATA CAGATACCCA
 CAGCCAGGA ATCTTGAGAA CTGAATGGCC CATAACAACC TCTGGCACTA TCGGAGCTGC AGGGAGGCTT GGCTGGGGCT
 ACTCCAGTCT CAGGCCCTCT TTTTTCAGCG GAAGTCACAA GGAGG

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CTGATAAGGA GGTAAATTICA TAGGAGCTGC TAAGATGGGC ATGAGGNTCA AACTGCAAAG CACCAACCAC CCCAACAACC
 TGCTGAAGGA ACTCAACAAG TGCCGGCTCT CAGAGACCAT GTGCGACGTC ACCATTGTGG TGGGGAGCCG CTCCTTCCCG
 GCCCACAAGG CTGTGCTGGC CTGTGCAGCT GGCTACTTCC AGAACCTCTT CCTGAATACT GGGCTTGATG CTGCCAGGAC
 CTATGTGGTG GACTTCATCA CCCTGCCAA CTTTINAGAAG GTTCTGAGCT TTGTCTACAC TTCAGAACTC TTCACAGACC
 TGATCAATGT TGGGGTCATC TAGAGGTAG CTGAGCGTCT GGGTAT

SEQ ID NO:1230: (Length of Sequence = 343 Nucleotides)

AGTGGAGAGA AGCCCTATGA ATGTTTTGAG TGTGGGAAAT CGTTTTGCTG GAGCACAAC CTCATTGAC ATGCCATTAT
 CCACACTGGA GAGAAGCCCT ATAAATGTAG TGAATGTGGA AAGGCCTTCA GTCCGAGCTC GTCCCTCACT CAGCATCAAA
 GGATGCATAC TGGGAAAAAT CCCATCAGTG TAACAGATGT GGAAGACCT TTTACAAGTG GACAAACCTC AGTTACCCCT
 CGAGAACTTN TTTTAGGGAA GGACTTTTTG AATGTAACCA CTGAGGCAAA TATTTTCCA GAGGNAACAT CTTCCTCTGC
 ATCTGATCAA CCATACCAA GAG

SEQ ID NO:1231: (Length of Sequence = 406 Nucleotides)

CTCTGCCCGG GCAGCTTGA GAAGGOGCAA TACTCTCCAG CTCCACCGTT ACTTCAGCAT GGCTGGGGAG GCCTTGGAAA
 ACTTATAATC ATGGTGAAG AGGAAGCAA CATGTCTTC TTCAATGAC GGCAGGAAGG AGAAGTGCTG AGCAAAGGGA
 GGAAAGCCCC TTATAAAACC ATTAGATCTT GTGAGAACTC ACTATCATGA GAACAGCATG AAGGTAACCG CCCCATGATT
 AANTTACCTC CCATGGGCTC CCTCCGCAA GACGTGGAGA TTATGGAAAC TACAACCTCA GATGAGATT NGGTGGGGAC
 ATAGGCAAAC CATATCAATG TACATGTGTC TTTATGGTAG AATGATTAT ATTACTTTAG GTATATAGCC AGTATTGGGA
 ATTGCT

SEQ ID NO:1232: (Length of Sequence = 380 Nucleotides)

AGACCATCAA AGGCCAGAG GAGAGACTCT TGGACAAAT AAATATTTAA AAGCAGTTGC CTATGAGAAA ATGAAAAAG
 CCACAAGCAA AGGTAAGATC CATGCTCCAA AAAGGCCTGA GAAATCTTA AACCTTCTCC TCAGATTGAT CCCAAGCTT
 AGAAGCAATA CCAAGATAAT AGCAAAAATC CTCCCTGGAA AAGAGTCAGT CTGCAAAAAC CGGAAAAGGA GGTGTTTTTT
 TCCACAATGC CTAATTTCTA ACAACAACAA CAAAACTCA GAAAACATGG CCCAATAAGT GGAAGAAAAT AAAGTGACGG
 AAACCTTCCC CGGAGGAAAC ATAAGCTTCA GGCAAACTAG ACAGATTTTA GACTGTCTAA

SEQ ID NO:1233: (Length of Sequence = 357 Nucleotides)

TTCAAAGTTT ATCACAACCA CCACCATCAA GACAGCAAAC CAAAGGGGCA TGGTAAAAGA AAGTTCAGT GACTCTGGAT
 TTGGTTCTAA TTTAATGCA ACTTCTTGAT TGAGTGCAAG GTCAGCACTA CTTCGAAGTG GCTTTGGCGT TTCANCGGTG
 GGTAATGGAG ACATTGCCAA ATTTATATTG TGTAATTTIN CGTGGGTGA GGGGAGCATT ACATCAATTAT ATAATGGTAC
 TTCTCAAGT TGCTGGTCAT CAGTTTCTGT GTGTTGCTG CCAAATCTA AAGATATGAT TGINTCTCCA GCGGCTGGGG
 CCAGCAAAGT TAAAGCATCA GGTTCCTTCT TAAGTTT

SEQ ID NO:1234: (Length of Sequence = 313 Nucleotides)

CCAAGAAATC TTAATINCIT TATGTTTGA CTTTTGACT CAACAATTTT TTTAAACTT TTTGTTTTTT NCTGAAACGT
 TCTGTGTGTT ATGAGCCTTT TGTTTGTINC TCGTTAAATG CACTCGACCC AAAATGGTT TGGCATATCG AAAAGGAGAC
 CAAGGAGGGA GGGGCTGGGG CGTGGGAGGT GGGGAGGAGG CCGAATGGA CAGAAAGTTG AGGATAAGAG AAGAGGAACA
 TAGAGACAGC CAGAAAGACA TGGGGAAAGA GTGTTGGAGA CAGAGAAAGG GGAAGGCAAG GGAAAGCCAA AAG

SEQ ID NO:1235: (Length of Sequence = 386 Nucleotides)

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SEQ ID NO:1223: (Length of Sequence = 370 Nucleotides)

ATAAGCATAT GANITTATCT ATAGGCCAAG TTAATGACAT AACTACAAG AAATGACTTG TTTCACATGT TTAAACCAG
 TGTTTTGGCT ATACTAATT AGTGAGACAT ATTCTAAGA AAAATAGAGA CGCAAAGAAG ATCTTACACT TTAATAGTCA
 ATTTTGTAAGT TGTAAATATTA CTATOGATCA TTTTGTAAGT CTCCTATATA GGGTGTAGGA TGGTGGAAAT AAGTAATTTT
 NTAATGTTG TTAGGAACCA AGGCTATCAG TGTAAGATGA AGGAGTTACA AGCATAAGAT TGAAGACGG TAAGTAAAAA
 GCTCAATTAGT ATAGTTCCAA GTTTAACTTG TCAGGGATGA GCTCATGATT

SEQ ID NO:1224: (Length of Sequence = 188 Nucleotides)

ACATGACCNA GGCCTGACCA AATCAGACTA AATCCTANTA CCTATACCAG AGTTATTGAG AAAGATAAGN TTGGCCTGC
 NGGCCTTTGA CAGTGAAGG NNTAGGCTT TGGAGCTCT CAGGGCCACT GCTTCAGGGA ACCTTGCTGA CAGTGAAGCC
 AACACAGATG AAAGCAAGGC CAAACATT

SEQ ID NO:1225: (Length of Sequence = 353 Nucleotides)

CCCCAGCCAA GGGAGGCAGT NAGINAGTGT GGTACCCAGC GTGGGAAACC GTGCTTTTIN CCATGGNACT NTGCAACCCA
 CGGATTAGAA GATCCCACTC AGGAACCCAC GNCAGTGGNA CCTAGAATGC CAACCCCAAG GCTGCACAGA TTCTAAACAA
 CCTCTCANCT GGAATCTGCC TAACCCTGCA GAGCTCTGC GGGGAGGGGT GACCACTGCC ACANCTGCTG CTGCTGCTG
 CCTAAGCCAT TTAA

254

CAAAAAGTTA GAAAAACATG TAAACGTAAG TNATGAGGTA TTTCATAGAT ACAGTGCCCA TACAAATNCT CTTTCCACA
 ATTTTCAACT GCCAGATCTC TTGCTTTAGT CTTTTNCT TATATTGGA GAAACAGAAG AGTTTGACAT AAAAGTCCCT
 TTGAGGATGT GAGGGTTGCA GTAGTTTACA GCAGGGTCAG AAAATGAAAG TAATAAGCA ATATTACAT GTTTTGTAT
 AAGACCAAAA ATATTTCCTT AAAAAAGTTGT TAAAGTTT TTAGTCTAT AAACACTCAC TTTTATAGG CACATGATTG
 TCTGTGTGAC TTCTCTTCC AGAGGAGGAC TTT

SEQ ID NO:1227: (Length of Sequence = 352 Nucleotides)

GGCATCTGTT TTTTGTGTTG TTTTGAGATA GAGTCTCACT CTGTGCCAG GCTGGAGTGC AGTGGCGTGA TCTCGGCTCA
 CTGCAATCTT TGCTCCCGG GTTCAAGCGA TTCTCTGCC TCAGCCTCCC AAGTAGCTGG GAGGTGTGCA CGCCACCACA
 CCGGTAAT TTTGTATTT TTTGTAGAGA TGGGGTTTCA CCATATTGGC AAGGATGGTC TCAATTTCTT GCGCTGTGA
 ATCCGCCGCG CTCAGCCTCC CCAAGTGTG GGAATCCAGG CGTGACCAG GCGCCCGGCC GGNATCTGTA GATTTTAAAA
 GGCCCCAGTG GTTCINATGC ACACCCCCAG AG

SEQ ID NO:1228: (Length of Sequence = 387 Nucleotides)

AGTTTTTCAA GATTGAGTGA CACTATTGTA ATGAGAATCT TCACTGGAGC ATCAGAAGAA CTGATTTCAA GCCAGTTTG
 TTGGTCAGCA CGGTCAAAC TTCAGAAGAA TCTGTGCTC TGAGGCTTTC CAAAGCTTTG TTCCCAGGG CAGTAACAGC
 TTCCAGTGT GGCAGAGTCT TTAGTATTAT CACCAGGGCA GCTGCACGT GGCCTGTAGC CATCTTCTC TTTTAGTACG
 ATCCCACCTG TCAGACTTCT TGAATTGCA CTTCAAATTA GAGCCCAAT CAAATTATCA GTCAAGNCTG TTATTTTGT
 CACCAGAGAA AGGACAGAGT CTGTTTCAGC AGAGTTTGA GCCAGGTACT GATCTCTCTT CAGCAGG

SEQ ID NO:1229: (Length of Sequence = 366 Nucleotides)

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GGAAGCTCAG TTGCAGCTGA CCGTATTAAAG GGTCCCTCTCC CATGTGTCTG TGCCCGCTCG TTAGCGTAGG ATTCTNIGCCC
CAGGGCCCTT CCGTTTTTCT AAGGGCTTGG CTTT

SEQ ID NO:1217: (Length of Sequence = 272 Nucleotides)

CTTCCCAGCT TTTCCTTGT GTAAACAGCT GGCAGTGGTT ACATCTATAT TTGTTAAGAG GCAGAGCACT GTATTTTGTG
TAAGATAAGG TGCTAGTCTT GGCCAGGCTG CCAAGCTGGG GCNTTTTAAA ATAAAAGTTT TAAAGAAAAA TTATAGCATA
ATAAATTACA CAATTTTATT GGAAACTGA AGGTGTTCAA CCAATGCTAG TTTTAAATA TATTAGAAA TACTATTTCA
GGAAATTTTA ACTACACTCA TTAGTCTTAT GG

SEQ ID NO:1218: (Length of Sequence = 281 Nucleotides)

GTGCCCCAGG CTGCAGTGCA CTTGTGCAAA CGCGGCTCAC TGCAGCCCCA ATCTCCCACT CTTAAGCAAT CCTCCACCT
CAGCCTCTG AATAGCTGGG ATTACAGGTG TGCAGTGCCA CAGCCAGCTA ATNCTTTAA TTTGTTTTAT TTTTAGTAGA
GATGGAGTTT CGCTATGTTG TAAAGGCTGG TCTGGAAGTG CTGGCCTCAA GCGATCCTCC CGCCTTGGCC TCTCAAAGTG
CTGGGGTTAC AGAGGTGAGC CACCATGCCT GGGCCTGCTC A

SEQ ID NO:1219: (Length of Sequence = 231 Nucleotides)

GTCTCTCTC CTTCTTCCC TTTATGGCA CTGCCCGAA CCAGGCAGCC AGCAGGGGAT GGGATCAGGA TGCAGTTGTC
ATGGAACCG TTGGGGATCC ACAGGAACGA CATTATACA GGGACATTN TGAAAGCAAA GCAAGAATGA NTGCTTTCCC
GATCTCAGAC TGGCTGGATT CAGATCATTG TTTGGCTGG TTCTATTTT AAGGGGTAAG CAGTTTGCTA T

SEQ ID NO:1220: (Length of Sequence = 409 Nucleotides)

AGTCACTCAG AAACCTACTT TGCTTACAGC CTCAATTATG TTTTGTGTAT TTGTTAAGAT ATTCCGTGTG ATGACATATT
TTGCCTTAAA TTINCTAATT TTCCTGGCCA TTGCTTTCCT GTGATTGAA AATGTTACGG TAAGTGCTTA GTTGGAAAC
TATACTGCA ACATATATTG CATTACTTCA GCAGAGCTGT AGTTCATAA CATAATAAAA TGATGCTTTT TTAATAAGA
AGATCATACA CATTTCATTA TGCCCTAAAA GATGAACATT CAAAGTTTAC TTTCTCTTG TTTTGATATG ACGGATATAT
ATCAGTAAAA TAAAAAATGC TGCAGNACCA ATATGCACTA ACTCAAACAT GCTGTGGATT TGTAGGGGCA CTGAGGTAGC
AATGTCAG

SEQ ID NO:1221: (Length of Sequence = 396 Nucleotides)

ATCAGAGATA CTTGTCTCTC ATGAATAAAT TAGTTAGTAG AATCTAATTT CTAGATCCTT CATAATGGTA ATTGAGGGTA
AAAAATAATA ATGTAGTAGT CAATTTTAGC CCTTTAAACC TATGGGGAAC TGTATGAATA ACTGTTTGAA ACTGCAGGGT
AATCCTGTCA CACTTGCAA CACATAGAAG CAACAAGACT ATTCTCTCTC ACACTTTTAA TTAAAATAGT GCCTGAGTAG
ACTTCCAGGG TAAGGTTCAG AAATTINCIT TCTAATTTCC CTGTTTAAAT GACCACTACT TTTAAAGCTA TGCTGGGAAT
TCACTTTTCA ATATATCTAA CTTACAGGAA ATTTTGAAG AGCCTAAATG TCTATGGGTA GATTCAATGT TTCCTT

SEQ ID NO:1222: (Length of Sequence = 350 Nucleotides)

GTATTTNTTT CTGGGTACTC TTCATGGCCT GCTAGAGAAC TTTACTAAAT TATAGTCCAG TAGCTGGACA GAGCTGCATG
TGTATGTCT AAGTCCACCT GTGCTGCTGG TCAAGATTAT TTTGCAGTGT TTGGTGGTGT TGAAGAGGAA TACTGTTGTG
AAGGCTGAGT CAAGTGCATG ACAATNCTCA TGGCTCACTG GCTGATGAGT TGTGGCATGA CTAGAAAGCT CTGCTGTAT
TCCCAGATGA CAAGTCACAC CTGAACAGCT GGATACTACT CGCATCCAAT TTGCTTCCA GTTAACATAT TTNCAGAAAA
TATTGGATT TGGAGTACAT ACAAATATTT

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GAGAAGATAG TAGAGAAAGT CAGCGTTACA CAAAGGAGAA CCAGGAGAGC TGCCCTCTTT GCCGAGCTA CCACTTCCCC
TACTCCAGAG ACTACAAGAG GTCGTAGGAA GAGTGTAGAG CCACCTAAGC GTAAGAAGCG GGCCACAAAG GAGCCCAAAG
CACCAGTCCA GAAAGCTAAG TGTGAAGAGA AAGAGACTCT GACCTGTGAG AAGTGCCCA GGGTATTTAA CACTCGCTGG
TACCTGGAGA AGCACATGAA CGTTACTCAT AGGCGCATGC AGATTTGTGA TAAATGTGGC AAGAAGTTTT TCCTGGGAAG
TGAGCTGTCC CTTACCAGC AACAGACT

SEQ ID NO:1211: (Length of Sequence = 344 Nucleotides)

TTTTTTTTT TTTTTTCAGG GAAGAGCTTT ATTGCTTCCA TGGGGGTGGC CTGGGACGGC TGCCACAGCT TGGGTAAGCT
CCTTGGGCTT CANTTCCCTT TGGTCCAGGC TAAAGGCAGA ACCCAACCAC CTGGCAGTNT TGTGTCTGAA ACCTAGAACA
TGTGGCAAGT TGGTGAGTCC GGGCTGCGG TAGTCTATG GNTCAGCTGC AGCTGTGGAG GGGAGCTCTT CCCAGCAGGC
GGANTGGGCG TCACCTCCTT GAGCTTTAAA GTTCTTTCTG CTATAGCCCT GGGGCGGTCT TGTGTGGCTCC GAAGGAATGG
GCTCCAGGCT TCCCCATGG GACA

SEQ ID NO:1212: (Length of Sequence = 364 Nucleotides)

AAAGAAAACC TGGTATTTTC ACCATCCTCT CTGAAAATAA ATACTTTGAC TTGCACTGAT TACTACTTCA TCAGCATTCA
ACTCCGCTCC GTGGCACTCT GTGTGAATAA TTTTAAAGGC AGATTAAGCA TTCTAAAAAT AAATTTCTAT GGTAAATTAG
GATATCAGAT GCTTCCATTA TAAAAGCCTA TCCTATTCTG TACTCTCAGC TGGCAGTCAT ATCCAGATCT CAAGCTACTC
TGGCTCTTAT TGAACAAGAA CCTATTCCAG GNGTGAGGT TTTGAAGAGG GGATCTCTCA TGGTTAACTA GAGNCAGGAA
GAGGCAGAAT TGCCACATA CTCTNGCAGG AGTTAAATAA CAAT

SEQ ID NO:1213: (Length of Sequence = 302 Nucleotides)

CTAATTTTGT TATTTTGTAGT AGAGACGGAG TTCTACCATG TTGGCCAGGC TAGTTTCAA CTCTGACCT CGGATGATCC
ACCCGCTCTG GCCTCCCAA GTGTGGGAT TATAGGCATG AGCCACTGTG CCGGTACT TTTCTTTT TTAAACACT
GAAATTGCTG TATCTACCAC ATTAACATT TATTTAAAAA AATTGTGTAA ATAGCATATG TATGTAAATT TAATATTAAT
ATACCTCTTT TTTGTCTCTT CTTAGGTGG TTGGAGCCTA GGGATACTTA CTACTGATT TT

SEQ ID NO:1214: (Length of Sequence = 317 Nucleotides)

CTAATTTTNC AGACAGGTTT ACATGTAAAA GGCTAGGTAT TTAGCCACCT CAGCATTGAT TAGTTTGGG TGTCTAAGCT
CTGTACACA TGGCTTCCA TGGCTTCACT CTACAAAACA TATTINCAAC GTGAAGGNTA CATCTACAAG AAATCTACAT
TTCAAGGGTT TTACAAATCA ATCTGTATC TTTCCCTGA ATTGACTCT ACAGACCCCG TCCCTGTIN ATTNCCTTTG
CCCAGCTTAA CGGTCCAAAG TCTACTTAA TGCAGCTCAA AAATGTTAAG ATTGGGCAAC AGATTACAG TTCCTGT

SEQ ID NO:1215: (Length of Sequence = 276 Nucleotides)

ATAAGGTATT AAACAATAT TCTGTACTT GANTTAAAAA AAAATCAAGC TGGGTGCAAT TGCTCATGGC TGTAATCCCA
ACACTTTGCT AGGGTTAAGT GAGAGGTTCA GCCCAGAAGT TCAGTACCAG CCTGGGCAAT ATAGTGAGAC CCCTTCTCTA
CAAAAAAAT GAAGAAATTA GCTGGGTATG GTTGATGATG CTGTGNGCC AGCTCTCGG GAGGCTGAGG CTGGAGGNTC
ACTTGGGCCC AGAAGGTCAA GGCTACAGTG AACCTT

SEQ ID NO:1216: (Length of Sequence = 354 Nucleotides)

GCATAGGCAG CCCTGCTCT TGCAATTACC TCCACGTGA ACTAGCTGCT CAGTCATTGC TCTGGAATAT GGAGTTGTGA
TCTAGAAATT AAAGATGGGA TTAGGTAACC AGTGAGGTCC CTTCTACTGC CAGGTATGA CTCTCTCTT TGTAAATGTC
ATATGTAGGG TCTGTACAC AGGACATTTT CTTCAATGTA GTTCTCAGA TGCAATTGAGC TCTCTGAAT GACTTAGCGG

303

SEQ ID NO:1204: (Length of Sequence = 346 Nucleotides)

CTCTTTAGAA AGCCTGCCTT GGCTGGGCTT GGTGGCTCAC CTCTAATCCC AGCACTTTGG GAGGCCAAGG TGGGAGGATT
 GCTTGAGCCC AGGAATTTNA GACTAGCTGG GGCAGTGTAG TGAGACTTTG TCTCTACCAG AAAAACCAGG CGTGGTGGCG
 CATGCTGTGA GTCCAGCTA CTGGGAAGC TGAGGCAGGA GGGTTTGCTT GAGCCCGGGA CGTGGAGGTG GCAGTAAGCT
 GTAATTGTGC CACTGTACTC CAGNCTGGGT GATAGAGTGA GACCTGTAT CAAAACAAAA CAAAAACAA AACCTGCCT
 TCTNGGGAIT GGGCTTCTGG GTTTTT

SEQ ID NO:1205: (Length of Sequence = 292 Nucleotides)

TACAACGAGA CACTTGAGCA CACGCTACA CCCAGACATC TTGGGGCTGC TATTGGATTG ACTTTGAAGG TTCTGTGTGG
 GTGCGCGTGG CTGCATGTTT GANTCAGGTG GAGAAGCACT TCAACGCTGG ACGAAGTAAA GATTATTGTT GTTATTTTTT
 TTTTCTCTC TCTCTCTC TTAAGAAAGG AAAATATCCC AAGGACTAAT CTGATCGGT CTTCCTTCAT CAGGAACGAA
 TGCAGGAAT TGGGAAGTGA GCTGTGCAAG TCCTGAAGAA GGAGATTGT TT

SEQ ID NO:1206: (Length of Sequence = 336 Nucleotides)

TTGCCAACAC AGTGTGTCAT GTTATTGGG CTATTACAG GTAAGCTTAA AATACAATGA AAAGAAAAGA CCAGACGTCA
 TCAGGAATGT CGAAGAACAA AATATTTAGC ATTTCTTAGT TTCAAATGTT ACCATTTCAT TGCAGCTGAG GAATATAGGC
 CATTOGTTGA CATAACTGCA ATGGGTGAGA CTTATTTTTA GCCACAGGAA GCAAATACAT TTAACCAATG ACTTTTAGGA
 CAGGAAGCAA AAAAGAAAAC AATATTTTCA TGTAGCAAGG ACAAGANAAT CATTTATACA AATTAAAGTG GATATTAAAA
 TACCATTATA AAGAGG

SEQ ID NO:1207: (Length of Sequence = 319 Nucleotides)

TGCCCTANCC TCCAGAGTAA CTGGGATTAC AGGCGCCGCG CGCCACGCCT GGCTAATTTT TGTATTTTTA GTAGAGATGG
 GATTTTINCCA TGTGGCCAG GCTGGTCTCC AACTCTTGAT CTCAGGTGAT CCACCTGCCA CAGCCTCCCA AAGTGTGGG
 ATTACAGGCA TGAGCCACTG CGCTGCTC CATTTCCCTT TTATAATTCA TCCCTGAAGT CCGTTAAGGT AGAGAAGCTG
 TTGATCGTC CCAGCCCCTG GGAGGCTGAA AGGTAAGTIN ACCAGCTCCA TGCTGAGTT TAGCACCTGC TGTGCCAGG

SEQ ID NO:1208: (Length of Sequence = 357 Nucleotides)

GAGATGTTA AAAATGAAGT GGAAGTTTTT TGTTTTTGTT TTGTTTTTGC AGAAAAAGA TTTTAAATGG CTTGAATGIN
 CTGCCATAGT TGCTCAGAT TGTAGAAAA TTATGTGTGA CATCTGAGAG AGAAAAGAAG AGCCTTTTGA GGAGCTGCGC
 TAAATTAATT TTTTGTITAG TCTCTTAAGT CTTTGGCTTG AATGAGTCAT TGACTTTCTT TGCCAAGATA GGGTTAGCAT
 TTGTTTTGTG TTTTAAAGC AGGCCAAGGG ATTGCCACGA GGGGAGACAA CCTGAGCAAC TGAAGGAAGG AATTCTTGA
 AATTGTGTTT ACCAGTTGTT TTAGTCTGAA TGTGATT

SEQ ID NO:1209: (Length of Sequence = 362 Nucleotides)

CCCATCTGCT CCACCCAAAG AAATCAGACA AAGTAAATTT TATTGAGACA GACAGAAATG CACCTACTCA GGACTACAGT
 TAAGCATTTA CTATTAACCA AAGAGTTGTG TTCACATTCC AGATAAGTCT ACGTGGAAAA GCATTAGAA TTTACTAGGT
 TTTTNCIACA TCACATTTTC ATCTACAATA GGGACAACAA ACTGACACTC AGGATTIGAT GGGCTCTCAT TACAATGCTA
 TACATTTAAC AGGNCNAAAC ATCAGTACTT TTGAGGAAAA AGTTATAAAA NGACCAAAAC CACCCACTGT AGGATGGGCT
 CTGGATGTT ACTGTACAGC GTGGGTCAAG GTAACAAGGA GG

SEQ ID NO:1210: (Length of Sequence = 349 Nucleotides)

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TANTTTAATC ATTACTCAGA AAAGGCAGTA AAAGATACTA TCTATAGCAG GCATCAATAA ATATGANCCA TGAGCCAAAT
CAGGCTTACC ACCTGATTTT NTAGGATAAA GTTCATTGNA AACACAGTTA CAGTGTCTTT CCA

SEQ ID NO:1198: (Length of Sequence = 318 Nucleotides)

CTCAATTICT TCTCATCTTT TINATGCTAT TATTGTCATA TAAGTTACAT TCCTATACAT TGTGTGTCCA ACACAAATTT
AAAAATTATGC CATTGTCTCT TAAGTCATAG AACAAAAGAG ATACAAACAA AACATACATT TATCCTGTCT TTTATATTTG
CCTATGCAGT TACCTTTACC AGTGTTCCTT ATTTCTNCAT GTGGATCTGA GTTACTGTCT TTNAACITCA ATCTAAAGNN
CTTTCAGTCT GAAAGACTGT AATTINAATT TCINGTAGGG GTAGGITAAC TAATGATTAA TTCTCAGTAT TCTGAGGA

SEQ ID NO:1199: (Length of Sequence = 326 Nucleotides)

TCTAGTATT CTGAGAACTA CAACCAAGAA AAGAGGGAAG CACCGGGTTG GCCAAGGCCA TCCGGAGACT TGTCTGTCTG
GGTCATTAA AAAGCTTTTC TAGGATAACG TTGGCTTTCC AAGTGGTTTT CCAAGCTGAT GTCTTTCCCA CTGAGGAGAA
GCTGTAGGCC TGTGGACTGC CAGGTAGGAG GAGGTTGAGG TTTAGAGGAA AGAGGAGAGC AGGAATGGGT TGTITNCAGT
GGGGCTGTTT CCATGGACTC ACCAAGAAGA AATCGAGGTG CTGATGGGGC TGCACAAGTG CTTATCAGAA ACAGCTGTAA
CAAGTT

SEQ ID NO:1200: (Length of Sequence = 341 Nucleotides)

GGGTGACAGA GTGAGACTCA GTCTCGCTGA AAAAAACAAC AACATTGCTT TACAGTGTGA TTCCAGTTAC AGAGAATATT
CACATAGGTG CATAAATAAA TGAAAAAATT ATTGGTTAAT GTCTCTGTAT GTTGGGATTC TCAGTGATTT TTTTTNCTA
CTTTTNAITTT TINATAATTC CTCAGTGTG TTGGTGTTAG CTTTATAGAT TATATCAAGT AACCTTTTGC TGCACCAAAA
AACCCCCCAA ATCTAGTGA TTAACAACAA ACCATCTTAC AATTTTNNIC AGAAGTGTCT AAGGCTGGAT ATTTTACTGG
GCTCTCTCTT GAATGTGGGG G

SEQ ID NO:1201: (Length of Sequence = 312 Nucleotides)

GTCTTTNTTA CCCTGCTAGC AATAGCTCTC AGTTTCAGAG GCACAGTCTT TGGAGACCAT TCAGCACTGA GAAAGCAATA
TTTAGAACCT ATTGCAAAAC TGGGCCTGAG TTAGGCATGG TGATGAATGC ATCAGCAAGG AATAGAAAGT NCTTATCGTG
AAACCTTCA ACCTCAACTA TGCCTTCATA GACACACACG TTCATGCACA TGTAGGCACA TGTACCATCT CACATCTTTT
ACTTTCCCGA GATGCCATAT ACAATTACCT ACATTAATAN CTGTAGCACT ATACCTTTTT GAGCCCGAGA GA

SEQ ID NO:1202: (Length of Sequence = 344 Nucleotides)

GGAAAATAGC CAGACTGGGT ATTATGCATG TAACAAATGA GGACATTGTG CATAAGAAAG GAAACATTAG TTTTCTGTCA
TCCTGGGCCA AGTACCTCAT TACAGTAAAT GTGTGCTTTT GGAAACTCTT TGCTTGTTCT GATGGCGGTA AGCATGGGGT
CCCAGGCAGG TTCAAAGGCT GAACTGTAAG AAATGGGCAA GACAATACAT TTGTTTTTGG AAGGAATTTT TCATGGGATA
AGTTTCCCAA AGCTTGAATT ACAGGCTATG AAATAAAGCA AATAGATGGA GGAGAAAACA AGTATTGTTT TCAAAAAGGT
ACCAAGTCAA TTCTATTAA AGGA

SEQ ID NO:1203: (Length of Sequence = 370 Nucleotides)

GTCTTTATC TTCTCTCTT TATGTGCACT ATGTAATGTC CTCATCATTT TAAAAGTGAG TTGCTATTGG GCGGGCGGG
TGGCTACGC CTGTAATCCC AGAACTTTGG GAGGCCAAGG TTGGTGGCTC ACTTGAGGTC AGGAGTTCAA GACCAGCCTG
GTCAACATGG TGAAACCCAG TCTCTACAAA AAACACACAC AAAAAATTAG CTAGGCATGG TGGCACACAC CTGTAATCCC
AGCTACTCGG GAGGCTGAGG CACGAGAATT GCTTGAACCC AGGGAGGCGG AGGGTTNCAG TGAGCCCAAG ATCGTGCCAC
TGCACCTCAA GCTTTGGGGT GACCAGAANC GAGACTTTCT CAAAACAAAA

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TCAAGCGNTA ACAATCTACA TTGNTATTT NCTTGGCCAC TGCATTCTTC AAATGANTAA TAAATTTCCA GAATTCOCAT
TCCCATGGTG TTTTTCCTAA TAGANCTTTT TCACACTCGA TGTTG

SEQ ID NO:1191: (Length of Sequence = 303 Nucleotides)

CCCGGAGAGC TGCCTTCCTC TTCTACCAAG TGAGGACACT GCAGGAAGAC AGCTGTCTAA GAACTAGGAA GTGGGCCCTC
ACCAGACATT GAATCTGCGC TCCTTGAAGT TGGACTTCCC AGCATCCAGA ACTGTGAGAA ATAAATTCAT GTTATTTATA
AACCAACCTG TCTATGGTAT TMTTGTAGC AGCCTGCAGC TCTCTATCAC TCTGTGTTAT AAGAGGCTGA AGTTTACTTT
ACCTCAGGCA GAGCTAAGCA AAAAAGATTA CATCCCGATT ACAAGATGAA AGTAAACAGA ATT

SEQ ID NO:1192: (Length of Sequence = 315 Nucleotides)

ACTCCAGCCT GGGGAACAAA CAAGCAAGAC TCCATCTCTA AATAAAAAAG AGTGTCCTCC TAAGATGCTC TGCGAAATAT
TGTAGACTGG TGTCCTCTTT GGATGATGTT TGCGTCAGC ATTACACAAA TAAACTTGCT CTCTGGGAAA AAAAAAAAAA
TAATAAATAA AATAAACAGT AAGAAACACC CATAAANCAA ATTTCTATGC TCCTGCAGCC TCTTTTGGCC TGAGCAAGTG
GGACCTGGT ATACACATCA CCTGTCCTT CCCTTTTCTT TGAAATGTTG TGTGTGCTGT TAAATGGGA TTGAA

SEQ ID NO:1193: (Length of Sequence = 313 Nucleotides)

CGAATTAGTG AACTGTGCTT CAGGTTCAAG AACCTGGTCT TAGCTCCTTG CCTGCTGAGA TTTTGAGTTA CAAGTAGAAT
TCTCCAAAAG CAAAACAGT AAAAGTCATT TTNCCACTCT TTTGGTCAAG CACATGTAAG CTTTCAGGAC CAGGTGGTAT
GCCGTNCTG AAGTGAGAC ACATGCCCCA GGGAAAGGGT AATTTTAAAA TTCTTCCCAT AGGTCTCAT CCTGTCTCT
TGCTATGTC AGCATCTTN AGTCCAGCT GCAGGGCTA TATTTAAATA CCTCATGCT TTATCGCTT TGT

SEQ ID NO:1194: (Length of Sequence = 341 Nucleotides)

GATTTAAAAG CAAGTNATTT TNAATCCAC GAAAGATGCC TACCTTGGT CCTNCTCTGG TCCTTATTAG CCACACCTCT
CTTGACAGGC AGAGGAGTTA GGAGTGAGG GATATTCCTA CCAAGACCTT ACAAATTGCA CTCTTAGGCC ATGCCCTGGG
TACCCAACT CTAGAATTCC CTCTCAAAG GGACCTTAAC CCAACTTCAG AGCCTATATA GGCCAAITCC TTGGTCCATT
TTCCAAGGGG TGGNCAAAG ACAACCATTT TNGGGAGGGN GANGGGAGTA GGATGAAGCT TTGGNCACGT GGGTCTGGG
CAATCCAC ATATCCCGGA A

SEQ ID NO:1195: (Length of Sequence = 239 Nucleotides)

TTATTGATTC TTTTFTTGAA ATGGAGTCTC GCTCTGNNC CCAGGCTGGA TTGCAATINC NOGATCTCAA CCCACTGCAA
CCTCCGCCCTC CGGGGTGGA GCGATTCTCC TGCCCTANCC TCCTGAGTAG CTGGGACTAC AGGTGCGCGC CACCATGCCC
AACTAATTTT GGTATTTTGA GAGACAGGT TTCTCCATGT TGGTCAGGCT GTTCTCAAGC TCCCAACCTC AGGTGATCA

SEQ ID NO:1196: (Length of Sequence = 291 Nucleotides)

CCATGCTTGG CTCAGGGCCT GGGGCGGGT CCTGGGTAGA GTCTAGCCC CAGAGCCCCA GCGGCTCATG TCCTGCCGCC
CCTCACTGAC CAGACGATGA TCGNAACCT CTTAGAGAAA CATGGCAAAG GATTAGAAAA GGGCAGGGTG AAATINCCAA
GCCACTCAGA CGGAACCCAG ATGATCTTCA ATGCAGCCAA GGAGCTGGGT CAGCTGTCCA AACTCAAGGT TCACATGGTA
CGAGAAGAAG CCAAGAGCTT NACCCCAAAG CAGTGCAGCG TTGTTTGAGT T

SEQ ID NO:1197: (Length of Sequence = 303 Nucleotides)

CTTCATATTT TTATAGCTGG GGTCAAATA TGCAATTTAA AAATAATAT ATCCATTINC CTATTCTTAC ATTTATGAAT
ATAAANTAA AATCTAAGAA ACATAATGCT GCCAACTAAT AGTAGTGGAG GAAAGGAAGC TGAGAGAAAG ATAAATATAT

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SEQ ID NO:1185: (Length of Sequence = 383 Nucleotides)

GAGAGGTGAG CAGGCGTGG GGGGGGGGAC TTCTGCAGAG AAAATATTTT TAAAGTCATA AAACCATGAA AATAACAACT
 ACTGTACGTT TTATTTTATA GAAATCAAGT AGTATCTAAT AGACAAGGGA AGACATTGAT CCATAAACTT TTTAAAGAAA
 ATTTGGTAAT CTCTTAAAGT ATTTGTATGG CTTTGAATGG GTGTCNTTTT CTAACTTTGT TTTAATTTT ATGATACACT
 TATAATTGTT TCAAATAGGC ATTTGTNCAT TTTAAACTA CTAGAAGTTA CACTGAAGAA AAGCATTCAA AAGAAGACTT
 TTGGACAAA AAAATTGTTG AATGAGTGAA ATGCTGAGG TAGCTCAATT TACCAAACAG GAA

SEQ ID NO:1186: (Length of Sequence = 373 Nucleotides)

GGGGCTCAAG GTGTGCATGT NTGAGGGAAG AGAGAGAGAG AGAAGGCCGC CTCANAGGTG ACTTTCAGCC TGCNAGCCTT
 CTTCGGGG CGCCATAAAC GCCCCAATT TCCCAGCTGC TAAAGGAAGA GGAAGGTACC TGTCGTGCA CGCAGACGGG
 AAGGGCTGGG GAAGCGGGAG GACTGAGAAA AGCCAGATCT TAGCAAAGCA ATGTCTCAAG ATGGTGCTTC TCAGTTCCAA
 GAAGTCATTC GGCAAGAGCT AGAATTATCT NTGAAGAAGG AACTAGAAAA AATACTCACC ACAGCATCAT CACATGAATT
 TTGAGCAGAN CAAAAGGGC CTGGGTGGAT TTCGGAAGCT ATTTCATAGA TTT

SEQ ID NO:1187: (Length of Sequence = 365 Nucleotides)

TCCACGCAAT TCTGAATAAA GTTTATTAAA TAATATGTAC AGCAAATGTA GTAATTCAAC ACATCTATTT ATCAAATCAA
 TCCACTGCAA TGAAGAAAA TAAATGANCA GAAAAATCTA TGCTGCATA GGCATGCTC TCAGTGTGTA ATTTAAATGG
 CAATACTTTA AATTAAATGG TTATATATAA TGTCAGTTAT TTCTCTTCA GAATATAACC TTTTTGTAG TAACCTATTC
 TAGCAATAGG GCTTAATACG NCTGCAGATA AATAGGCTG CAAAAACCAA AAACCCAAAA TAATGAAATT NAAAAGGGGA
 AAAAAACTGT AACTGNGNTC AGAGTTACCT TTCCTCCCC ATAGG

SEQ ID NO:1188: (Length of Sequence = 350 Nucleotides)

ACTATGGCT TACATTTATT TTAAATTTCA CTAAATACAA ATCTTGATTG TCATGCCAGT TTAGATCTT ATTAATTINC
 AGAATGGATA AATTCAAATA ATCATAAATT ACGGTAACTT TTTATTATAC CAAGGTGTTT TAATGCCATC ATATGANGAC
 AGATGCTTCA AACAACTGCT ATTAATTTAT ATTTTNNATA AAATTAAAT CTATTTTAA CCTATTTGTA GTCACAAACC
 GAAAACGTTG CGNCTTTACC TTAGAGCTAA AGGCTTACTT TATGCATACG GGATATTTAA TAGTCTACAA ATCAAAGGTT
 TAAACAGNCC CTAAAAAATT CCATATATTC

SEQ ID NO:1189: (Length of Sequence = 393 Nucleotides)

GCAAACTTNC TCACTTCCTC AAAGAAGAGT AGTGCACTAA AAAGAAGGTT GCACCGGAG AGCATGTAAA GTGTCTCAAG
 GGGGACATCT GAAGTNCCTC GTTCCAGGG AGCCCACTGG CTCCTCACAA GTAATCTAAT GAAAGCTATG CATTCTCTCT
 GGGCTCCTCA TATGAAAAAN CCCAATGTAT GANGCAAAGC CTAGAAAGGA TTCAATACTG GAGAAATGCA CACAGCTACC
 GATAAAGACA GCTCAAAAGT CTAAGGCTG CTGACATGAA CCAGATAATT GGTGGCTACA GTTGTGCCTG CTAAGATTG
 GGTGCATGGG GCTTCGCTTT GTTAGCTCC CATGGTCTTC TTTTTCAAA AAAAAAAG AAGNCTTCAG GTT

SEQ ID NO:1190: (Length of Sequence = 365 Nucleotides)

AGTGTAACA TTCACATATT TAATAGTACC TTAAAATAA GCATTACTAC ATTTAAATG GTTCCAAAT GAATCTATAA
 ATGGTAATAT AAATTAAAA ATACGAACCT AAAGTGAATA AATTTTAAAC CTTAGCTATG GTATAATAA TGGTAAATGT
 ATAGTGTACC TGTAGTCAAT TAAATGTCT TAAAAGATAA CAGCTTGTGA CCAGAACATT AGANACCATA GCCATGATTC

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TCATGATGCA GTAAGTACAA ATCTTTTTTG AAAGAGATAT TGCTTGINAA CATTITGGAT TTATAACATT GGCTTATAAT
ATATACAACA TCTTTATAAA TGCCACCTCA GTTGGGTTTT AAGCCTTACA AGAGTGCTAT GAGTAAATAT CACCCACTTT
AAAA

SEQ ID NO:1179: (Length of Sequence = 297 Nucleotides)

CCTTGGGAAT TGTTCCTTGG AAATTAAAGC ATGTGTCTCA CACAAACAGT AGAAGGCATT GAGCATTAT TAGTCTTTCC
TCAAGAAGAT ATCAAATGA GACTAGAAAC TCTCTGGTGA ACACAGAATG CTCGAGGGG GNCCAAGGTA CATTATGACC
TTAAACGAA CTCCTCTCC ACTGGCCCTA TTAICTACTG TGGAAAGCAC CATGCCAGGC ACAGCAAGAG ACTTAAGAAC
ACCTACAAAG GAAGATCTCT NCCATCCACT TGTGTAATTA TCTTTAAAAA GTAATCC

SEQ ID NO:1180: (Length of Sequence = 278 Nucleotides)

GCTGCTTGGG ACTTGAAATC TGTGGCOGAA GACNGTCAC TACATAACTT CAAAAATAAT CAACCCACCT CCCTTCCCAA
ACCACCCAAA TTCCTCATC CAGCGTTTAC TTTTTTGAAT CCACTCAGAA CTTTTTNCCTG CGACCCCTT CCCTAAATGG
AGTGGGTGG GGGGAAATG AATACTGAGT TGGCCTTTAT TTTTAAAG ACTTTTGTAT CCAATGAGGC CCCCTAATA
ATTGAGTTTT GGGTCTGTT TGGTTTGT TATTTGT

SEQ ID NO:1181: (Length of Sequence = 331 Nucleotides)

AATTGAGTTA CAGGAGAATA CTGTGAACAA TTGTACACCT AAAAGTAATA ATCTAAATTA AATGTACACA TTCCTAGAAA
CACACAAATC ACAAANCTG ACTCAAGGAG AAATAGAATA TCTCAACAGA CCTATAACAA CTAAAGATAT GGAATCAGTA
ACCAAAGCC TTCCAACAA GAAAGCCCN GGANTAGATG ATCTTCACTG ATGNTTCTA CCAAACATTT AAGAAAGATT
TAACACTAAT TCTACTCAA CTCTCCACA AAAAATATGA GAGAGTAGA GAAACTTTC TAAATATCT TATGAGGCA
GCATTACCGT G

SEQ ID NO:1182: (Length of Sequence = 345 Nucleotides)

GTGIGINTAG AGGATGGAC AGGATGCTGT TTATTNCCC TTTCTTGGAA ATGGACCTTC TGTCCCTTCC ATTTGGACAC
CACAGTGGAA GCTGGTGGCC TGAAGGAAG GATTAGGTCA TGGACATTG AACAGGTGCC TTGGGCATGA TGTATAGATG
CAGTCATATA TACCTTGTCTG GGTGGGGTG CCACCTCCAG TGGNCAGCTC CAGATCCAAG GAGCAGCCCC CTGGGGATGG
ACCCATTCA TTATCATGA CTCCAACAG TTTTINATG TGAAGAAGA AACTTINGCA TTATAGAGAC ATCATCAAA
AACAGTANAA ACAAATCAA CCTG

SEQ ID NO:1183: (Length of Sequence = 272 Nucleotides)

ATGGAAGATT CAGAGATCAA AGGTGAAGTC CTCTATCTCG GCTACTACCA ATCAGCCTTC GACTGGNATG ATGAAACANC
CAAGGCTCC AAGCAGCATC GTCTTAAACG CTACCACAGC CAGACCTATG GCAATGGGTC CAAGTGGGAC CTTAATGGGA
GGCCCCGGGA GGGGAGGTT CGGTCTCTCT GTACGAGGG TGCAGGTATC TGTGGGACT ACATCGATCG CTGGAAGAG
CCCTTCTCT GCTCTTATGT GCTGACCAT CG

SEQ ID NO:1184: (Length of Sequence = 335 Nucleotides)

ACATTTTGCA AACTCAGTTG ACTCACCTCA NATTTGCCAT TCCAATTACA GGGCCTCGAA AGAGTCAGCA CTCAGCCTTG
CTCAAGGNTC AGATTTAGGG GTTGCCCCC GNCCCGCAA CCTCCACCT ATGTGTTCAA ATGTCTCAA GACAATCACC
ACTGTATTAA GAGAAAGAGG CATGGGGGCA GAGCAACAAG GAAATAAATG AGGCTTGAGA ACTGTGTCTA GGTGGGGTGA
CTTTGAACCT TAAACCAACC TTGGGNCCCA AATCTGCATG AGCAGGGGGT GGGCTATCAT GCTACAGANC CCCAAGGAGG
ACATTTTTC CAACA

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GGTTTCTCTG TAGCTACACC AGCTGTTTCAG AAAGCTCATT GGACCTGGTT TTGAAAATAA AACAAAGTTA AAACCCTGGG
 AGGAGTTATT GTNCAGTGTG GAGTACTCAG GCTTTCTTAT AAAGAAAAAA AAAGGTATC TGGTACCAA GTGTGCACCT
 ACAGACCCTC AGGTACTGCC CTGTGACTTC NCTGTATGAC ATCACAAGGC TGCCAAGTGC TGCTTINCTA GACTAGGGAG
 TTGGTGAGGT TTTGCTAG

SEQ ID NO:1173: (Length of Sequence = 274 Nucleotides)

GAGATCTAAA TGAAATTTAT AAGAAAATTG TGGGTTCTGC CCAAGATGAC ATCTAAATTG AAGAAGGTAC ACAGTGAGTT
 TAAAGGATCA ACGAGAGAAA CTPTTATTAT TCATTTCAC AAGAAGACAC ATTCAGTATC TGGATTATCC AATATATGGA
 ATACTTTGAG TTGAAATGAT TAAAGGGTAA TCTTTAATCA TTAATTAACA AATCATTAAT TAANCAAAT AATATTTAGC
 AAATTAAGCA AGTINCTAAAG GCTACATGCA AACT

SEQ ID NO:1174: (Length of Sequence = 326 Nucleotides)

AGAAATTAAA ACACTTTAAT ATAAACATTT CCAGAATATA GACTGACCTT ATATCAGTAC TTTTNGAGAC CGTTTTAAAA
 CTATATATCA TCTAAGTTTA TTATAGACTG TTTTATTTTC CACTTTCAGA ACTAGAAAAT GCAAAAATAC ACTGCAAATT
 AGATTTAACA AAGAAAAAAT CAGTTTAAGN TATTTTCATAC ATATTCCCTG GNGAAAGCTG AGACACATAA ACACAGNAA
 ACAACAATAA AATACCACCA AACTAACAC AAAACCAAGG AAAGAACTGN TTTTGTAAAG CTGTGTAATT CTGTCTTTA
 AAATAA

SEQ ID NO:1175: (Length of Sequence = 426 Nucleotides)

GCAGTCAGGA TGGACACATT AGAAAGAAAC ATTTTAGTTT CAATGTTACC ATAAAACCAG AACGAAAAGC AGCATGCTGT
 ATTATATTIN NCAATTTAGG TTCCATTTCT AACTCCACCT AAAATGAATA TGAACAACT CATTTTAAAG TGTGTGTCAG
 TCAATACAA TAATAGTCTA AGTTTATTCA CATATGTACC AACCAAAGCC CAATAAGCT AAAAGGAAGC CAAGTGTAAT
 AAAAAGGCAG CTATAAGGTC TTGTGTTGA NTTTTTACCC AGCAAGAAAT AAATGATACT TAGTAATCCA TCTTTCCCCC
 CCACGTCCAT CCCTGCACAC ATCTAAAATA GGCTAACTTC ACCTATTCTA ACTTCTGAAA TTGTTTGGG APTCCGTGT
 TACTTTCTCA GAGTGGATGG TATAGC

SEQ ID NO:1176: (Length of Sequence = 301 Nucleotides)

CTAATCCTCA ATCCTATCCC TTINCCCTT AGCCATCCTC TCTAATTINT TTAACCTAAG CCTGTGTGTC CTCAGAAAAT
 AGGTTATGCT GTTGGTGTGT GTGGTGGTA ATCTATATAC ATGGNGTTAT GCTATTGATT TTGTTTGGTA ATCTCCCTTT
 TTAATCAATA CTATATTAT AAGANCCNT TAAGTGGTTG TATGCCTCTA CTTTATTGCT TCTGACTGCT GCATGNAATT
 CCATATCAT GTCCACCACA CTTACTCATT CTCCTCTTG ATGGACGCTG AAGTTGCTTG G

SEQ ID NO:1177: (Length of Sequence = 331 Nucleotides)

GCAATTCTCC TGCCTCANCT TCCTGAGTAG CTGGGATTAC AGGTGCCTGC ACCACGCCCG CCTAATTTTT GTATTTTATG
 TAAAGACAGG GTTTCACCAT GTTGGTCAGG CTGGTCTCGA ACTGCTGACC TCATGATCCG CCGGCTCAG CCTCCCAAAG
 TGTGGGGATT ACAGGCATGA GCCACCAAGC CCGGCAATC CATGCTTTTA AACATTACTC TGTATGGTGT GATAATGAAC
 AGTCACTGNT ATCTGACTGT TCATCTGTGT GGTCCATCTG TATTGAATAA AGGAGGAAGG AGTTGAAGAA TAAAGGGGAA
 AATCTTGCA G A

SEQ ID NO:1178: (Length of Sequence = 325 Nucleotides)

GAAATNTTG GAGAGAATAG TCATACCTAC TTTAAAGAG AATAAATTGC CTTTCCTAAA TNCCTCTGCT TCGCTCCTTT
 CCTGGCGTTG CTCTGGAACC TTGTGAGTTA TATGTATGAT TNCGTACTC TGATATCCAT CAAAGTGCAT AACATAGTAC

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GTTGTGCATA CATTCCAAAG AATAAAATGC TAGCTACTAG GTTTTGAGAA GCAGAATAAA ATATGATACT GA

SEQ ID NO:1167: (Length of Sequence = 305 Nucleotides)

AGGAAAAGGA TTGATCACAG GAGAGGTACC AAGGGAGTTC CCAGAATAAT AGAAAAGAGG NTCCTCAAGA AGACAGTCAC
GCAAGAGACC AAGAGAAGAG CTAATCCAAT TGATGCAGGA GGAAGTAGAG CTTCAGAAAG AATGTCTCAA AAAAGAAAAA
AAAAGAAAGG AGTGGGTAA GTATCTGATG ANTTTNCCTAA ATTGAGAGGA GTTACATAGC TCTATTGAAA ATCTTAGATA
AANNIGATTG ATAAATACAT AGANCATAAA GCAAACACTG AAATAAGGCA ATTATCAACT CCAGG

SEQ ID NO:1168: (Length of Sequence = 342 Nucleotides)

AAGGTTTTAG TGATGATTCA GTGAGAAACA TATTTGAAGC AACAAAGCACA GTAACCTGGAA GCTGTAGGTA CTCAATAAGT
GTCAGTTTCC TTCTCTTCT AAAAGCTGIG CTTTCAAGTC AATTGTATGT CTAGAGTCGC ACTGTCTGGT ACASTGGCCA
GTACTAGCCA CATATGGCTC TCAAGTACTT TAAAGAGGGC TAGTCTGAAT TGATATGTTT CATACATGTA AAATACTTTA
AAGAGGGCTC ATCTGAATTG ATATATGCCA TGCATGTAAA ATACAAATCA GATTTCTAAA ACTTTGTACC AAAAAATACC
ATAAAATAAC TTACTAATAA TT

SEQ ID NO:1169: (Length of Sequence = 397 Nucleotides)

GAGACGGAGC TCCNTCTGTC GCCAGGCTGG AGTGCAGTGG CACGATCTTG GTTCACTGCA AGCTTCACCT CCCAGGTTCA
CACCATCTTC CTGCCCTCAGC CTCCCGAGTA GCTGGGACCA CAGGCGCCCA CCACCACGCC CAGCTAATTT TTATATTTTT
TAGTAGAGAC GGGGGTTTCA CCGTGTAGC CAGGATGGTC TCGATTTCTT GACCTCTGTA TCCGCGCGCN TTGGTGTCCC
AAAGTCTGCG GATTACAGGC GTGAGCACCA ATGCCAGCC TTTGGAGACA CTTTTGATTG CCACAACCTA GGGTAGGGAG
GGCTGGGAAA TATTACTGGT GTGTAGTGCA TCGAGGCCAG GGATGCTGCT AGACATCCTG CAATGCACAA GGACAGG

SEQ ID NO:1170: (Length of Sequence = 422 Nucleotides)

GTTTTAAAGC CTCTGGACAG AGCAGTATTT CGTTTAAAC TTGTTTTTC TTAAAAGCTT ACAGTGTGTTG GCTAATTCTC
CTCCCCTTT TACAAGACGG GGGCCGAGG GTGGACACTG GTGGCAGGTT AAGGGTACT GTCACTTTAA GAAGCCTGCA
GATTGAAGTG TAAACATGGA GAAATTAGGG GCTGATTTTT TAACTGTGT GAGATATTAA CCAGCCGCC TGTATATAAA
TCAGGAAATC CAAACAGCGA TTACACCGA TTAACACCCC CTTTATATAT TTTTACAAA AATACACTGA GAAAAAATC
AAACGTTTTT ATCTCTCTG TCTTTTTTG TTTTTTAAA GTGTCAAAG TCTACATNTA AATATAAAN ATTAAAAGTT
AAACTCTAGC CCTTCAGTGA GG

SEQ ID NO:1171: (Length of Sequence = 384 Nucleotides)

TCTGAATGGG TTGGTGAAAG GTTACAGGAG CAGACAGCCT CCACACCCAG GCTGCTCTTG GCTATACAGG CTACCTCCAT
CCCTGANTGT TGTAATAGGA AAGTCTAAAC ACACAGAAGA GGAGCACAAA ACCAATAATT ATCACACATT CAAAATAAAA
CTAATCCATA AAGAAAAGTA CCAAACTCAA CAAAGACAGC AATGCCTGAA AACACTGGGC TGTATCAGCA AATAGAACAA
AGAAAAATAN GCATAATTAA AACAGTAGAA GGTGAAGGAT AATTTTTTAA ANTTAGATAT CATATTCTGA TTATTGAAAT
AAAAAACTTA GTAGAAAAGC TTAAGTGAAG AGGATCAAAC CTGAGGAGGA CCCCAGGCT TTTG

SEQ ID NO:1172: (Length of Sequence = 418 Nucleotides)

GAGAGAAAAA AAAAAAATCT TTTAAAAGCT GCCATCTGAG GTGATGGCTT CTCTGTACTT ACGCCATACC CCAGANTACA
ATAAATAAGC AATTAGAAAA CGTTCAAGTA TGAAGGGATT TCCTCCTCCC CGCCAAAAGC ACTGCTCTCT GAAGGAAGCT

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SEQ ID NO:1160: (Length of Sequence = 215 Nucleotides)

GTAACAAAT CAATTAACAT GATTATCCA GACCTTCTT TTCTACTGG AAAAAAGAGG GCATTAACT GGATGATGAC
AATAACACCA TAACTACAAG CTTTATAAA AGTCCTTTAT ATACAGTGTT AATACAGTGA AAGNTCAACC TTATTGAAAG
AGGCTGGCT TCTGCCCTCA GCTACTGGGA AACATCACT AGGCCTCTGG CATGT

SEQ ID NO:1161: (Length of Sequence = 298 Nucleotides)

AATCTTTAA ACTACTTTGA ATCTTATAGA AACATCAGAA TCTTTTGAAT TCAAAAGAAG CCAGGGACTC TAGCCAAAGT
GGAGTGGTTT TTTAACTCAA GGATTTAGGA CCTTGGCTGA ATACAAACAT TGAATGATTA CTCAGTAGGT GCCAAAGCTC
AGGACTTTAG ACAGAGTCAG AGTCCAGTTT GTNCTGAAAC ACAATTTGAT TTCAACTATT GTTTTAAGTG AGAGAGGAAA
GTGACATTAT TATGAGTGTA AATTINCTGC TTTTAAAGTA GAAGTTACTG ACAATIGA

SEQ ID NO:1162: (Length of Sequence = 163 Nucleotides)

GAAATAAGAA ACAGCTTGTA TATAACTAAT GCTTTGAGGG AGAAATTCAA ATGGCTATGA AAAAATATTT ATAATTCAAT
GATAATAAAA ATCTTACAGG TTAAACTTG AGAATGTAGT TAAAGCAATA CTTGGNCATA ANCTTAGCAC ATATTAGTAA
AGA

SEQ ID NO:1163: (Length of Sequence = 393 Nucleotides)

GCCAACACCA GGAGCATTTT ATTCAAGATG TAAATGAACC AGTTCAAGAA GCTGGTGGTC AAGGAGGAGG AGGTGGAGGT
GGCAGTGGAG GAATTCGAGA AGCTGGAAGT GGTCAATGA NCTACATTCA AGTAACACCT CAGGAAAAAG AAGCTATAGA
AAGGTTAAAG GCATTAGGAT TTCTGAAGG ACTTGTGATA CAAGCGTATT TTGCTTGINA GAAGAATGAG AATTGGCTG
CCAATTTNCT TCTACAGCAG AACTTTGATG AAGATTGAAA GGGACTTTT TATATCTCAC ACTTCACACC AGTGCATTAC
ACTAACTTGT TCACGGGATT GTCTGGGATG ACTTGGGCTC ATATCCACAA TACTTGGTAT AAGGTAGTAG ATT

SEQ ID NO:1164: (Length of Sequence = 260 Nucleotides)

TGCATTCTTG CCTCTTGAC AAGTCTGCT TCTTTACAAA GGACTTGA AGTNCCTCAC CCAGACCATC TCACCTGTAC
CGAAATAACC TCCCCTACTA GCGAATGAGC AACTTTGGAG CAGAAAGCAG AAACCTGCATC ATATTTCTCT TACTATGCAA
ACTGGTAGCT CAAACCTCAT ATGACCTCAA AAACTATAA TTGCTTCAAC CTAAAAAGC TGATTGTAAA AAAAAAAAAA
NGCTGTGGTT GCACACAGT

SEQ ID NO:1165: (Length of Sequence = 330 Nucleotides)

CATTGGTATT TAAAAATGAA TATTAATATA ATGAAATGNN TTGCTTTT TGTAGGCATA ATAAGCCAAA TACTTTTTTA
CCCAAAATAA TTTTINAGAGA AAATGATGTA ATGAAAAATT GTACCATGAA TTAGGAGCAT AGTTTTTNC ATTAAACGT
CACCATTACT TAAAGATGA TTGATTATTG CTATACCAA TCAGATGAAC TCTGTTTCATC ACTTTCTTNC TCTGTCCCA
AACAAATTGG TTCATTGAGA CTGAAATGTT TGTGCTTCA ACTTATTAGA ATGGAAGATA ATGCAGATAT TTCTGTGGGA
AATAAAATAA

SEQ ID NO:1166: (Length of Sequence = 312 Nucleotides)

ATTGGAGATG CCTTTGTCAA ATTTNCCCAT TTTAAATGGC CAGGAAAAAC AATAATTATT TTCCTGATGC TGAGGTTTTA
TATCTTAGTA GAAGAACTTA AACTATGACT TGTATTCAAG TCTAACAGGA ATAGAGGTAA TGANTGAAAG TAGTCATTGA
CCTGGGACAA GATCACTTTG AACATGACAC TATTATACAA AGTGTAAATAT TTATTTTTAA ACAACCACTT TTCAAAGCA

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CAACCTCCTC TTCAGTGTCA AAAAAGCCAC GGTTAGACCA GATTCTGOC GCCAACCTTG ATGCAGATGA CCTCTAACA
 GATGATATGTT TTGTTTCCTC CTTTCATCTC TAATAATTGA TTTACCATGT TTTTCTAAAA TACTTGTTAT GTCITTNCIT
 TAAGAAGTGA CATATATTTA TGTFTAGTTA CTGTTATTC AATATAGCCC TGACCTCAGT GCTAAACTTT ATAGTTGATT
 TTAAATCAA AAGTATTATT TTGTGGGACT TTAAG

SEQ ID NO:1154: (Length of Sequence = 203 Nucleotides)

CCTAAATCTT AAACCTTACA ACAGTTAAAT AAGACCCCTT TCAAAGGGAT TAACACACTG AATATTATAT ACATACAGAT
 TTATATTTAT GCGCTATACA CATATATGNN CTTTATCTGT ATATAAATAT GTGATGATAA TGATAAAAGG ATAATGATTA
 CACGTAGGAT AAACATTTAT CAAAAATTGT ACTATAAATA ATA

SEQ ID NO:1155: (Length of Sequence = 343 Nucleotides)

GAAAACAAAA CACTAAGCTA TTTTGGACA ACTGTTCTAC ACAGAAGAGA GCTTCTCTTA ATTTAAAAA AAAAAAATC
 CCAATAGGC ATTTTTAGGC ATTAAACAAA AAAGAGAATC CAAATGAAAT ATTATACTTG ATGTTCAATT TTAATAGCAT
 CTGATAAAG GTATGCTTCC TTTCAATTGA NTACATTTCT GNACATGTAT GTTATAAAAT CCAGGNAACA GCCAAACCAC
 AAGTTAATC TTAACAATGA ATATACATAG TTAACCCAT AGTAAGCAGC CCGTTTGAAA AGCACTGATG CACCCAACAN
 TTATATGGTT CCATTTTATA AGG

SEQ ID NO:1156: (Length of Sequence = 396 Nucleotides)

CCCACCAATT GCCATTAAAC CTCCCAATCT TTAAGGGAG GNTCTCTACT TACTGTTTCA AGGCAAAAAG ATGATTAAAC
 TATCTCACAT GGTGTAAAT TGGGCCTAAA ATAAATGACT CTAGTGGTAG CATTTTATGT AGGCAGGTCC AAGGAAGACA
 GATTTGTAGA CAGAGTTGGG AAAAGGGTCA AAGAGCCAAT GAGTCTCCCT ATCCTGAGGG ATGCTTGAC GGAGCCACAG
 CATGANTCA TGTFTTCTG AATCCATCTC AGTTTATGTG ACAGGATGGA AATGCTTCTT TTCTTAGCCA GTGTGCTTG
 TAACGAGTTC CTTGCAGCTC AGGGAAGGGA GCAACATGTA CTGCTTTGTT GCTTCTGTG TAGAGAAGGC AGGAAT

SEQ ID NO:1157: (Length of Sequence = 269 Nucleotides)

CAGGGTCTCA ATCGTCTCC CAGGCTGGAG TGCAATGGCA CAATCTCAGC TCACTGCAAC CTCCACCTCC CGGGTTCAAG
 TGATTTCTCT GCTCAGCCT CCTAGTAGC TGGGACCACA GGCACTCGCC ACGGCAACCA GCCAATTTT GTATTTGTAG
 TAGAGACAGG GCTTCAACCAC GCTGGCCAGG CTGGTCTCAA ACTCTGACC TCAGGTGATC TGCTTGCTC GGCTTCCCA
 AGTGCTGAGA TTCCGGCGTG AGCCACTTG

SEQ ID NO:1158: (Length of Sequence = 190 Nucleotides)

CTTATTAGTT AATCCACGG CAGATTTTCA TTTCTATCGA ATATATTATA TGTAAGAACT AGGGCCTTAA ATAATTAGC
 TGACTTTNCC TATTAGTTAT TCCTTAAGAT AAAATTATGC TGGTGAAAAT NACTGINGAA TTTCTCAAGA AATTAGCTC
 TATAGAGGCA TAAGTAATCG AAAGACTTTT

SEQ ID NO:1159: (Length of Sequence = 340 Nucleotides)

GGGCACTGAC TTCTGGGAG TGTAAGCNC TCACCTGGAC CCCACAGCCA GTGAGCATTA GTGCTTATAT TCCATCTCC
 AAAGCTCTTT CTTCTACCA GACCACACAT GTGGCCCAAG GAGGGATATT TACTCTGCAC TTTTAGAGTT CTAGAAAACA
 TTGTTTAGTG GTCTGGCATC ATCTATATT ACTTGGCTTG ATTTGGGATA GAGTATAATC CTAGTCTCTG ATGAAAGGAT
 TTTNATGAGT TAACCTTATG GGGTGATGGG ATTTATGGGA TTATTTCCAC CCTTAAATG ATTTTGTGGG GAAAAAAGT
 GTACTAATCC CTAATTTAGG

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ATTTCAGTGG CCATTAAAGAC CCTGAAAGTT GGCTACACAG AAAAGCAGAG GAGAGACTTC CTGGGAGAAG CAAGCATTAT
 GGGACAGTTT GACCACCCCA ATATCAATCG ACTGGAAGGA GTTGTACCA AAAGTAAGCC AGTTATGATT GTNACAGAAT
 ACATGGAGAA TGGTTCCTTG GATAGTTTCC TACGTAAACA CGATGCCAG TTTACTGTCA TTCAGCTAGT GGGGATGCTT
 CGAGGGATAG CATCTGGCAT GAAGTACCTG TCAGACATGG GCTATGTTCA CCGAGACCTC GCTGCTCGGA ACATCTTGAT
 CAACAGTAAC TTGGTGTGTA AGGTTTCTAA TTTCCGACTT TCGGTGTCC TGGAGGATGA CCCAGAAGC

SEQ ID NO:1148: (Length of Sequence = 386 Nucleotides)

ATTAAATTGCT TGCCATCATG AGCAGAAGCA AGCGTGACAA CAATTTTAT AGTGTAGAGA TTGGAGATTC TACATTCACA
 GTCTGAAAC GNTATCAGAA TTTAAACCT ATAGGCTCAG GAGCTCAAGG AATAGTATGC GCAGTTNATG ATGCCATTCT
 TGAAAGAAAT GTTGCAATCA AGAAGCTAAG CCGACCATTT CAGAATCAGA CTCATGCCAA GCGGGCTTAC AGAGAGCTAG
 TTCTTATGAA ATGINTTAAT CACAAAATA TAATTGGCCT TTTGAATGTT TTCACACCAC AGAAATCCCT AGAAGANTTT
 CAAGATGTTT ACATAGTCAT GGAGCTCATG GATGCAAATC TTTGCCANGT GTTCAGATGG GGCTAG

SEQ ID NO:1149: (Length of Sequence = 364 Nucleotides)

GGCAACAGGG TGAGACTCCA CCTCAAAAAA TAAAAAATA GAAAGATATT ATTCAAGAAA AGAACTTAGG AGCCAGGTGC
 AGTGGCTCAT GTCTATTATG CCACTACTTT GCGGGCCAA GGCAGTAGGN TCACTTGAGG CCGGGAGTTC AGAGACCACT
 CTGGGAAACG TAGCAAGACC TCGTCTCTAC AAAAAAGTG TTTAACAAT TAGCTCAGTA TGGTGGCACA TGCTGTAGT
 CCCACCTACT CAGGAGGCAG AGGCAGAAGG ATGGCTCGAG CCTTGAATT CAAGGCTGCA GTGAACTAAG ATGGTGCCAT
 TGCACTCGNG GATGGGTGAC AGAGCAAGAC TCCATTGCCG CCAG

SEQ ID NO:1150: (Length of Sequence = 267 Nucleotides)

GACAGGTGTA ATCTAAGCTT AAATAAACCC CCCGGAGGCT GCACAATTNC TTGGCATCTC TCCCCTGCCC TCTCCATCCG
 CATATTCAAT TTGGAGTTTG GAGAAGTATC TAGAATCINC TCCCACCCCA AAATGCCCAG CAGAGCCCCC CCGCGCCCC
 CGCACCCCTT GGAGCTGGG CTGTGTAAT CGTTGAGATG TCTGANACTG TCGGGGTCC CTACCTAGTG CTTCAACCAG
 ATCACCTCAC TTTGAGTTT CCTTCCT

SEQ ID NO:1151: (Length of Sequence = 386 Nucleotides)

GGAGACGAA GGAGGAGTAA AGGCATGINT CACATGGCAG CAGGCAAGAG AGCGTGTGCA GGGGAAGTGC CCCTTATGAA
 ACCCTCAGAT CTGCTGAGAC TTATTCACIA CCATGAAAAC GGCACAGGA AAACCTGCCC CTAAGCTTCA GTTACCCCCG
 ACAGGTCCCT CACATGACAC ATGGGGACTA TGGGAGCTAT AATTCAAGAT GAGATTTGGG CAGGGACACA GCCAAACCAT
 ATCAGATACT TACCACATTA GACACTGACA GACAGCTCAC CACAGATTCT GGGCTCTATT CAAGGTGTTG ACTTTGATCT
 TTTCCAGTT GTAAATGTTT CATCAAAAA AACTGTGATT TTGCATAAC TTTTTCAAG AGTTGC

SEQ ID NO:1152: (Length of Sequence = 239 Nucleotides)

GCAATCTTTT GAGTGACTTA CTTTGAGTCT TTGTACCTT TCCTTGATT TTTTACATG GTTTAACTCA GTGTACCCAA
 GAGTACTAGG TGCACTCAAT TCTGCTATTA ACTCTATAAG CAAGINCTTA AGAAAGTTAA TGTTAAAAA TAATCTTAAA
 ATTGCTTGA TAGGAAAAAT GTATTTGAAA TTAATAAAAA TTCTTATGTT GACTTCTTGG TTTTGAAACA ATGAATATA

SEQ ID NO:1153: (Length of Sequence = 275 Nucleotides)

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ATTTGTAGAT AGAGGATTCT CCTTTTGTCT AGTAAATACC ATTAACATAT TINCAGANGG CCTGGTCTAG GGTCATTTAT
TCCAGGGCCT CT

SEQ ID NO:1141: (Length of Sequence = 410 Nucleotides)

GTTAACCTGT GCGCGCTCC GGTATCOGG CGCCTGANGT TTTAGCTGCG GTGGGGGCGG CAGTCGGGAC CGACTNAAGA
TGTCATTTGT CAGAGTGAAC CGCTGTGGTC CCGANTTGG TGTAAGAAAG ACACCGAAAG TAAAGAAGAA GAAAACTTCA
GTGAAACAAG AATGGGATAA TACGTGACT GATCTAACC TTCAATGGGC AACTCCTGAA GATCTGGTAC GCCGTCAATGA
AATACACAAA TCGAAGAATA GAGCATTAGT AACTGCGGAA CTCCAAGAAA AAGCTTTGAA GAGAAAATGG AGGAAGCAGA
AACCAGNAAC TTTAAATCTT GAGAAAAGAA GATTNGTCTA TCATGAAGGA GGNITCTTTC TGATCAATAC CAGATGCAAA
GATGTGTTGG

SEQ ID NO:1142: (Length of Sequence = 392 Nucleotides)

TTTTTTTTTT TTTTTTTTTT TTTTCNNGG ATTGAATGTC TTTATTAAAT AAACGAGTAA ATGGTAGCAC AAATCACCAT
CAATATTTTT GGAAGGATTG GGGACAAGAT GTGAGTCAG AATATAATIN TCCATTTCAG GTTCTCAATG TAGCTGAAGA
ACTGTGCCCA CTGATCAGTA TTACGTATTG CAAATGCAGG AGGTAAGGCT AAAATAGGAC TTATGCCGTT CAGAAGATTG
ANTTTGAAAC CTTAAAACT ATCATAATAG TAGGAATGCA TGTTAAGATT TGATAACTTT CTTTAGCTAG AGTTTTCAAC
CCACAGTAG GAGCAAAGTT GTAAAGTGAG TAGGINTGAA GAAGGGACAC TCTTTTGAGA AAAGAAATIN GC

SEQ ID NO:1143: (Length of Sequence = 200 Nucleotides)

ACTTCCCTC TCCTGGCATC TGCTATAAAA ATAAGAAGGA GCAAATATTC TTGCCTCTTT TTATCACCTG ANCTGAAAC
CCATTGTAAC TGCCATGAAA ATAAGCACTG GTCCATGAGA CCAATGCCCA GAAATTCAG GCTAAGATTG CTGAAAGTG
GGCTGTGGGC ATTATTTAAA ACACACACAC AAAATTTACC

SEQ ID NO:1144: (Length of Sequence = 333 Nucleotides)

AACAGAAGCA TGTTATTTC TTCCATTCC CAGAAAGGGA GTTAATGAAG ATAAAAATTT ATTTTTTAAG GTCTTTATTG
AGAGAAACTT TGTTTTTCGA TATGAATAT TGCAATGTT TTTATAATA CTTTCATTA AATGATGTA ACAGTAGTAC
CCAACACTGT AAATCAGTG AAAATAGTAA ATGATCTTT TATTACTAAG ACTGTCATGC ATTCTGAAGC AGTGGCTTT
TTTTTAACCA TAGGAAGTCA TTTCCCTCTA GTCCTTCCC TTCTACTCTC CTGCTCAGAC CATTAGTAGG TACTTTGTTA
AATAAAAAAC TAG

SEQ ID NO:1145: (Length of Sequence = 225 Nucleotides)

TGGGTTTCTG ATCCGAGAAA AATTGAAAGA CAAACATGGC TGGGGGAAGC AAAACGCTGA CACACAATTC AGGTGGCCCA
GCAGTGCTGA CCTGCAATCC ACCCCACCCC AAGGCAGCCC TTTCAATCCA AAGTGGACAG AGTGGGCCTT ATCCAGANT
CACTCAGGAA GCTTCTTCAA ACATATGACT GCCACACCCG CCCCCAAGGT TCAGAAACAT CTTGG

SEQ ID NO:1146: (Length of Sequence = 223 Nucleotides)

AAGGNACAAT ATTATTCTAA ATAATTTAGA TTTGGAAGAC ATCAATGACT TTGGAGATGA TGGGTCTTG TATATTACTA
AGGTTACCAC AACTACGNT GGCAATTACA CTTGCTATGC AGATGGCTAT NAACAAGNCT ATCAGACTCA CATCTNCCAA
GTGAATGTCC CTCCAGTCAT CCGGGTGTAT CCAGAGAGTC AGGCTAGAGA GCCTGGGGTA ACT

SEQ ID NO:1147: (Length of Sequence = 389 Nucleotides)

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SEQ ID NO:1135: (Length of Sequence = 402 Nucleotides)

GCAGAGGCTT AAAGAGTGCT TATTCACCTGA GGCTTGCCCT TNCCTACTCC TTCCTGGGAA CCCATTITGGC AACAAAGTGAA
GAAACCTAGG CCAGCCINCT TGAAGATGAG GGACCAACGG AGAGAGAGGC TCTGCTGTCC TAGCCCTCCC ACAGAATAAG
TAAGCCTAGC CAACACCACG TGGAGCAGAG ATGAACCATC TCAGTTGAGC CCAGCCCAA TTGCTGACCA AAAGAATTGG
GAACAAATAA ATAAITATTG TTTTAAGCTA CTGTGTTTCT GGGTGGTTTT GTATATAATA GTAGCTACCT GATACATTGG
GATGACCCCA ATTACTTGAA CTCTCTTAG GCTGTTTTA TCACGTCAA ATAGGGGATA ATTTTAGTAA TTNGGGTTG
CT

SEQ ID NO:1136: (Length of Sequence = 381 Nucleotides)

CAGGTGCGAG CCACCACGCC CAACCCAGAA CTCITTTTAT TTTGCAAAAT TGAAATCTA CCCATTAAAT AGCAACTCTN
CTTTCCCTT CTCCCCAAG CCTTGGCAA CTGCTTTTCC ATTTCTATGA CAATCTCTAC TCTAGATACC TCATAGAGGG
TGAATCATAC AGTATTGTG CTTTATGAC TGGCTTATTT CACTTAGCTG CTATATTATT AATACCAGCT TTCTGGGGAT
ATAATTACA AACTGCAGAA TTGAATGGT TTNAGTCTAT TCACATCGGA TATGTTTTG AAGAGACAGT AAAACCAATC
CTTTTTCTCT TAGGTCTCA GACACACACA TGCTCTTTA TCTGGCAAGT CCGTTATAA A

SEQ ID NO:1137: (Length of Sequence = 325 Nucleotides)

TATTTTTGT ATAGACAGGG TCTGTATTG TTGCCCCGAC TGGTCTGAA CCCCTAGTCT CAAGCCATCC CCTGCTTGG
GCCTTCCATT CCTCTACTTT ATACCACGGT TATTCACCAA GCTTGCTTT GTTCAGTGA CTCTCTCATG GAAAAACTGA
GGTGATATTT ACCCTGGTTT TTCTACCACT GTGTAAGTGT CGCTAGTACC AGCTCAAAAA ATAAGAAATG AATAAATGAG
TGATGACTAT CACTATGTTG CTCAGGCTGG ACTTGAACCC CTGGGTCCA GTGATCTCC CGCCTCAGCC TTCCAAGTAG
CTGGG

SEQ ID NO:1138: (Length of Sequence = 422 Nucleotides)

CAACACACAT TAGCCTTAAC AACAAAGAGC TAATCTTATG TAAAGAACTC TTACAATTCA GAAAGAAAAA GATCCTAGTG
AAAATGTGGG CAAGAGATAG CAAAAACCA GCCATATGAT AATAATAGTC AATAAGTGAA TCTGAATGAT GTTATCINCT
TTTGTCATTT TAGAAATACA AATAAAAATG ATGATGAATG CNCTTGCTTA CTAAATTAGC AAAANCTGGG AAAAGATGAT
GATATTCAGG GTCAGATAAA GGGAAAAGGG TGCCCTTCTA TTGCAGTTTG GAAAGTAAAT TGGCACTGAC TTTTAGTGGG
GATAGTCTTG TAATATGGGT CAAANGTCTT CAAATGTGT CCACATTTTG GGGCCTGCAA TTCCACTTCT AGGGATTTAT
TCTAAGGAAG TACCTAAAAA AT

SEQ ID NO:1139: (Length of Sequence = 367 Nucleotides)

ATACCGAGAA GCATGCAAGC GGTTGGCTCCA CGTCCACAT CCATCCCCAA GCTGCTCCTG TTGTCTGCAG ACACGTTTTG
GATACACTCA TTCAATTGGC CAAGGTATTT CCCAGCCACT TCACACAGCA GCGGACCAA GAAACAAACT GTGAGAGTNA
TCGGGAAAGG GGCAATAAGG CTTGTAGCCC ATGCTCTCA CAGTCTCCA GCACTGGCAT TTGCACAGAC TTCTGGGACT
TATTGGTAAA ACTGGACAAC ATGANTGTNA GCGGAAAGG CAAAGAACTC CGTGAAGTC AGTGCCAGTG ANGCGCTGGC
GGTGAGGGGG TAAACCTTTT NCATACAGCC TTCAGGCGCT CTCCTACT

SEQ ID NO:1140: (Length of Sequence = 412 Nucleotides)

ATCCAAAGGA TATAGGCAAG CATCAGATAC AGCCAAAGCA TTCTTTTCTT AAAAGAGTCT GAACGCATCT NATGCAACAC
CCAAAAGTAT CCTTTTNCCT CTCGTACAG TATGTTTGG CTTTGGAATA AATGATTAGT TATTGAACAA TATATGGAGA
AATATCTTAC AAAAGGAAGT CATTTCATT TTCTAACATC TTTTACATG CACTAATTAC ATGGTTTAAA TGAATATCCC
TAATCTTCAT CCAACTACAC CCCATGAATT TNAGGTTTAT TTAATCAACC TAGTTAGACC AGATATATCC TTCTAAAAATC

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CAGTGGTACA GCAGCAGCAG ACACGCATCG CAGAGCTGGA GAAGACGTCA GCTGAACACA AACACCAGCT GGCGGAGAGA
AGCAAGACAT CCANCTGCTA AAGGCATACA TGCATGCAAT CCGCAGTGTC AACCCCAACC TTCAGAACCT GGAGGAGACA
ATT

SEQ ID NO:1130: (Length of Sequence = 382 Nucleotides)

TTTTTTTTTT TTTTTTTTTT TTTTTTTTTT TTTTACTGT TCAAACAGCA ATGTTTAGTT GTACAACACA TAAAGTCTAG
CAACAATTAC AGGNCAGTT TGAGTGTCTG TTTGCTTGT TTCAATTGGG AAATTTAACT GTAATGTCAC CGTAAGATTG
GCTGGGACTG GTAAACATTTA AGAAACGGGT TGTCNCTGCA TCCCCTAGGC GTGGGCTCT TGCTCCATCA GGACTTGGTT
GTAGATGAAT GGCCACAAG TCACCAGCCT TTGAGCAAGT TGTGTCCAGG TGGAGACAGG AAGAGGGTGG GCAAAGGGGA
ATTCTATAAA GACACAGTGT NTGGGGCAGT GGCAGTCAAC ATTCGCAAAC ATTCATGCAT CT

SEQ ID NO:1131: (Length of Sequence = 406 Nucleotides)

ATGCTAATTC AGGCTCCACA GATAGTCTG GTGATGGGGT TACATTTCCA TTAAACCAG AATCCTGGAA GCCTACTGAT
ACTGAAGGTA AGAAGCAGTA TGACAGGGAG TTTCTNCTGG ACTTCCAGTT CATGCCCTGCC TGTATACAAA AACCCAGAGG
CCTGCCTCCT ATCAGTATG TGTTCTTGA CAAGATCAAC CAACCCAAAT TGCCAATGCG AACTCTGENT CCTCGAATTT
TGCCCTGAGG ACCAGACTTT ACACCAGCCT TTNCTGATTT TGGAGGCAG ACACCTGGTG GAAGAGGGGT ACCTTTTTTG
AATGTTGGGT CACGAAGATC TCAACCTGNN CAAAGAAGAG AACCCAGAAA GATCATCACA GTTCTGTAAA AGAAGGTGTA
CACCTG

SEQ ID NO:1132: (Length of Sequence = 400 Nucleotides)

ATTTTGGTT ACTTCAGGCA GGAGGGTAGA CATAGCACTT ATCTGGATTG GATGTAGCCA CAGGATTAGA ATTGTTGGGT
CATAAAATAT GTACATGTTT AGCTTTAGTA GATCTTGCTT AGAGTTTAAA AAATTAAAAA TTAAATATT TTTTAAATTA
CAATAAATTC AGCTAATTTT AATTTTAGAT AATTTTATA ATGTAGTTGA TCTTGGTTT AACCAGAGCA TGTCGCTGGA
TTTCTNCTCC CAATCGAACA CAGTAGAGAG AGAAGGTGGC GGGTCTTAG TGATACCATG CACTTTTTTT TAGAACTTCA
GTGCTGTATC CCTTCATTTA CAATGTATGA TGAAAAATAC TAAAGAAGGG ATNGTGGTGG TGGTGGGGA GGCAGGAGAG

SEQ ID NO:1133: (Length of Sequence = 347 Nucleotides)

CCCAGGGCGC GCCATCCATG GACGAGCTCA TCCAGCAGAG CCAGTGGAAC CTCCAGCAGC AGGAGCAGCA CTGCTGGCG
CTCAGACAGG AGCAAGTGAC AGCGGCCGTG GCCCAGCGG TGGAGCAGCA GATGCAGAAG CTTCTGGAGG AGACCCAGCT
AGACATGAAC GATTTTAAAC ACCTCCTGCA GCCCATCATC GACACGTGCA CCAAGGACGC CATCTCGGCC GGGAGAACT
GGTGTTCAG CAATGCCAAG TCCCGCCGC ACTGTGAGCT GATGGCCGNN CACCTCCGGA ACOGCATCAC GGCTNATGGG
GGCACACTTC GAGCTGCGGC TGCACCT

SEQ ID NO:1134: (Length of Sequence = 389 Nucleotides)

GGTCCAGGCC TGCAAGACTT GCCTAGTGAG AAGATATAGG AATGGGAACC CAGGTAACAG TCTGSOCACT TTNCCATAGG
GCTGCTGCAG TATGCCCAGG GCGCGCTCCA GTCTCTAGTA GCCTCANATT TTCCAGTACC TGGAGTTATC ATCAGTGAAG
CCTGTGAAC AGCAAAGATG GCAGCCTACC GTCCTCTTG GAAGCTTTGC CTTAGGGAGG TATGAATGAN CTINTTGTG
GCCCAAACAC ACCTGTAGGA GTGGCTINGA GACCCAGTT TGGAGGTTTT GCCCAGTGAG GAGGAATGGC ATTGGGAAAG
TGCTTAAAAA AGCAGTCTGG GCCTCAITTT TATAGAGCAG CTGTGCTAAT GCTGAGGGGT CCACAATCA

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SEQ ID NO:1122: (Length of Sequence = 181 Nucleotides)

CATCTTTTAA CATCAAAGTA CTACCAAGTA AAGAATTAA AAATTACTTG TCTAGTCATG ATATATTTTC CTNCTGCTGC
TGAAAAATCC CTGTCTTATT ATTTTCATGTC CCTTTATCAT TCATTTGATG ACACGTGACAG CAACTTGCTG AACAAGTTTA
AGAATAGCTG ATATTTACTG A

SEQ ID NO:1123: (Length of Sequence = 174 Nucleotides)

CCCTAGAGTT AAATTTACCC CATGAAACAT CAGCCACATG TCATATCAAT TCAAGTGTGT AACATTGATA TAATCGGGTA
CACCACAGCA GCACTGACAG AACAGAAAT GATTGAGAGA AAGCCAATTA AACAGCCAG GGGATAAAGC AGATCTGTAT
GACATTAGCT TTTT

SEQ ID NO:1124: (Length of Sequence = 232 Nucleotides)

CTTTTAGCAG AGACGGGGTT TCACCATGTT GGCCAGGATG GTCTCTTGAC CTCGTGATCC ACCCGCCTCG GCCTCTCCAA
GTGCTGAGAT TACAGGCATG AGCCACCGCG CCTGGCCCGG GGAAGGCATT TTTNAAGAAA TAATAGTTGA ATTGAGATCT
GATAAAGAA GTAGGAGCAA AATNGGGGGG GTGCAGTTTT CCAAGAAGAG AAGACAGTAC ATATAAAGGG CT

SEQ ID NO:1125: (Length of Sequence = 233 Nucleotides)

GATACTATGG GTTCAGTGAC ATAGAGACAC AATTGAATTA GCAATGAGCT TCACTCAGGA GCCAGAGAAT GGGTTTNTNT
CTAAGAGATG TTTTAAGTAA CATTTAAATG GCACTGCTGA TTGATACCAG CATCAGGAAG CTGAGGACAA GAGCTCTCTG
AGAAGGAAGT TGCCATATTA CAGAAGTGAG GTGACCAAGC ACTTNTTGTA GGTCTGTACA TTTAGACATT AAT

SEQ ID NO:1126: (Length of Sequence = 258 Nucleotides)

TTTTTTTTTT TCCTAGGGGC CGCAAGACGG CTAATTTATT ATAATTCTC GCGCGCAGTT GCGCTCTGGC GCCA...JTCGC
AGAACGGAGC GCGCGGGATG CAGGAGGAGA GCCTGCAGGG CTCCTTGGGT AGAAGTGCAC TTCAGCAATA ATGGGAACGG
GGGCAGCGTT CCAGCCTCGG TTTCTATTTA TAATGGAGAC ATGGAAAAAA TACTGCTGGA CGCACAGCAT GAGTCTGGAC
GGATTAGCTC CAAGAGCTCT CACT

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GTGTGAATAG GCAAGCACTT TGTTTGTGT ACTAAGGAAC TCAAAATGAT AGGCTTTTIG TCACCATGTG CTTCCAGGNT
CTCTGTTGCA TGAGCAGAGA TAGAGGATCT TGCACAAACA ATTAAATGCT CTAGCCATAA GTAGTGCAAG TTTCCNTTGC
TTGAAATTTA CTGCTGATAG CCACTTGNC ACACCTTACT TCCAGAGGCT AGGAAGTACA GTTTTCCCAC AGTCTAAGAA
TGAAAGAGNA TTAACCACAG TAATGCATAG CACTCATACC ATGGATGACT GGATAATTTT AAAAGAATGG GAATATGCAA
G

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ACAGCTCAAT GACTTATCAC AAAGCAAAGC CCCAAGAAGT CACCACCCAG CTCCAGAAAT AACACATTGA AAAGCTAGAA
AAATCTCAAA TTGACATCCT AACACCACAA CTAAAGGNTC TAGAGAACCA AGAGTAAACA AACCACAAAG CTAGCAGAAG
ACAAGAAATA ACCAAGCTCA GAGCAGAACT GAAGGCAATA AAGACACAAA AAACCTTTAA AAATAGTCAA TGAATCCAGG
AGCTGTTTTT TTGAAAAA

SEQ ID NO:1129: (Length of Sequence = 163 Nucleotides)

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AAGCTTTCTC CAGATGGAGA AGAGACCATC ACTGCCTGTT TAGTTAGGCA GGAANGCAGA GGTGTTTCTT TTCTGGGGCT
AAAGNCTCTT TCTGACCACA CA

SEQ ID NO:1116: (Length of Sequence = 416 Nucleotides)

CACCTTTGGG AGGTAGGGAT CATAGTTCCA CTTCAITGAT GAGGAAACT GTAGTGCAGA GATGGCATAC ACTGTCCAAG
AACATGGTGG TGGATGGAAC CCAAACCCCA ACTTTTGCTC CCATGINCTC TGTCCACTGG CTATGGCTCT TGCCCCGTG
TACAGATACA GGCTCTGGAC AAGTTCACCA AATCCCTTAG GCTTCAGCCC CCTCATCTGC AGAATAGTGG CTGGGATTCC
ACCATCTTCA AGGTCCCTGC CAGCTTINAT TTATTAAAT TTGGATTAT TAAGCAGGAA AAAAAGTAAT GGGAGTTTGT
GGGTACCAAT GGATTAAAGG GGGTNAATC TGGNGGCTNG TGAGTAAAT TAGGGTCCCC AAATGG

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AAGGACCGGG ATTCTGATGA AGCOGTGTTT CTCCTGCCT GAAGTTTCCC TTTGGAGTTC CAAAGTAAAG GACACATAAG
CAACACTTCC AAAAACAAGG GAACAAGGTG GTTTATTGTA AAAACAGGAA ATGGTGCATG TCATTGAGAA CTATTTTAAAT
GCAGCTATGA AAAGGGAAAA AAGTGCCAG TTCCTGATTT CTTAGTACT GAAGAGGACG TAGCATTTC TTTATCAAAT
ATAAGGAAAA TTATTCACCA TTTTGAAGCT CACCTAGAC TATGAAAT ATATCACTG CAGAGCAATT ACTTCTGTCA
TTACCTGAAG TGATCAGTAT CTATCTTCTT TGTATAGCA TGATCTCTC AAAAAGGCCT CCACTCCTTT CCTCACATC
TGTGGTCATC ATGATT

SEQ ID NO:1118: (Length of Sequence = 379 Nucleotides)

GACAGCAGCG TGTCAGGGC GGCTGTGGAG GTGTGGGA AGCTGAAGGA CCTAACTGC CCTTCTCTG AGGGTCTGTA
TATCAGAG CCAAAGACAA TTCAGGAAGT GCTGTGCAGC CCCTCAGAGT ACCGCTTGA GATCCTAGAG TGGATGTGTA
CCCGGCTG GCGCTCACTG CAGGACAGGT TCAGCTCACT GAAAGGGGTC CCAACAGAGG TGAAGATCCA AGAAATGACG
AAGCTGGGCC ACGAGCTGAT GCTGTGTGCG CCAGATGACC AGGAGCTCT CAAGGGCTGT GCGTGGGCC CAGAAGCAAG
CTACACTTCA TGGACCAGTT GCTGATACC ATCCGAGGC CTGACCATG GGTGCTCCA

SEQ ID NO:1119: (Length of Sequence = 233 Nucleotides)

CAATATTCAA GAGTCTTTAT TGAAGACTTG AGATGGGACT TCCAATCAG AGGATGTGGG AATCCAGCT CAAATGATAC
AGGATAAAGT GGGATGGGCT AGGATGGACA GGCTGTGGAT ATGGGAGTCA TGGGTCAAAG TCTTATCCA GATGGCTCCA
GGTACAGTGG GCTTCTGGG CTGGAAGCTG GGTCTCCCC ACTTCATCT GCTCAAAGCT TCTTGAAGGA GCT

SEQ ID NO:1120: (Length of Sequence = 325 Nucleotides)

GAAAAACAA CCATACCTT NCTTTTGAGG AAAACTTACA AACTTTATAA AGAATAAACA TGAATCINCT TAGAAAGTTC
CAAGATAACA TACACAAGT ANTCACCTT TCATATATAG GCACCACACA CATAAAGATG TAGCCTAAAT CACAATCACT
TCTACCCAGG GATGGAGATA GGAATTTACA TTCTTGACTT CATTAGTCT CTAATTTGGC AAAACCTCC AAGCCTTTTA
TACACATGCT GCGTGTAGGC CAGATCTCAC TCATCTTAT AATTGTGCAA ATAATATGGA GACCAAAGG GCAGGGTTTT
CAATT

SEQ ID NO:1121: (Length of Sequence = 161 Nucleotides)

ATTAGTATTT TTGTCTGAT GTCTAGCAC TGTTCAACAA CAAATTTTNC TAGTCTTGT TAAATTTNAT TTGTATACA
ATGAAGCAC AATGTTATAA GGAAAGGTAA TTTTAAGCTA ACAACCAGTG CACAGCCTCA GGTTTTAAAT TACAACCACA
G

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CGCTCGINTG TCCACACAA ATGTTTAAGA AGTCACTGCA ATGTACTCCC CGGCTCTGAT GAAAAGAAGC CCCTGGCACA
 AAAGATTCCA GTGCCCTGA AGAGGCTCCC TTCTCTCTGT GGGCTCTCCT AGAAAACCAG CGGGACGGCC TCCCTGCTGA
 TACCGTCTAT AACCTTAGGG GGCCCTCGGG CAGGCAAACAT CATCTCGGTG ATGGCTGTAG ATGCTAACAC TGGCCAATTC
 AATGNCACAN CTACTGGTGA CCCCTTTTGA GGGGCATTTC TCCAGACAGA AGGCCCCCTG AAGCCTAGGT AGGGCAGGNT
 CAGAGATACA CCCGTTNTTG TCTCGAAGGC TT

SEQ ID NO:1110: (Length of Sequence = 218 Nucleotides)

GTITTNTTCA TTTATTNNCT CCCCATAAAA CAGTATGTAC AAGGGTTTGA TTCAGGGGAG AGAAAGGATA TATGAAGACA
 CATTCTTCCC TCTTCTATTC TCTTACCTGG TTAGAAATAA ATAGGCATAT AGTCCNGTIT ATTATGGGCA GGAAGGTAGG
 TAAAGATCAC CTAAGTNCIT ATGGCGTGT GGCTTTGGCA CATGGAGAAT GAGTTTTT

SEQ ID NO:1111: (Length of Sequence = 211 Nucleotides)

TTTGCTTTAT GAAGAAGCTG GCCTAGGTAG GGTTACAAAT GGGTTTTACT GAACTTAAAC AGCTAATTGC TACATCTCTG
 AAAATAATCA GAATAGAAAA ATAGATGGAA AAATTTCAAA CCCACTGTAA GAGACTAACA TAAATCCAAT TCCAAAAGCT
 GTTAATCATA CCATCTAAAA AGAAAACITG CACTAATCA TGTGTTTACA A

SEQ ID NO:1112: (Length of Sequence = 360 Nucleotides)

CCCTATAATA GTCCCGTGAA TAGGGCTAGC AGTGGGATTT TTGTTTATA GGCGAGGAAA TAAACACTCC TTTTGCTGAG
 ACTAAGAGC CAGGTTGGGG TCTCTGGACA CATAGTGCAA TCAAGGGAGG CTTAAGACAG CAGAGGCCCT CAGAGAAGAC
 GTTCATTCTC CCAGCTACTT GCTAAGCAGC TNCOGTGTGA TCTGGGCAGT CCTGGGCACA CCAGTGGTGA AAATACATGG
 TCCTGCCTGC CTGCCTGGAG CTTCTATTTT CCTNATGGGA GAATGCTGCT CCATTTTGT ATTGGAGGAA CTTTTTGCAA
 GCAAAGCCTN TTTGGGGAAA AATGGCGGGC TAGAAACCTG

SEQ ID NO:1113: (Length of Sequence = 448 Nucleotides)

GCGGGTACTG CGTTAGTGAT TAGAGTTTTT NCCCTGCCGG AGGTGGGATA CACGGTAGCA TCATGGTGA GGAGGTACAG
 AAACATTCTG TACACACCTT TGINTTCAGG TCGTTGAAGA GGACCCATGA CATGTTTGTG GCTGATAATG GAAAACCTGT
 GCCTTTAGAT GAAGAGAGTC ACAAACGAAA AATGGCAATC AAGCTTCGTA ATGAGTATGG TCCTGINTTG CATATGCCCTA
 CTTCAAAAGA AAATCTTAAA GAGAAGGGTC CTCAGANTGC AACGGGATTC ATATGTTTAT AAACAGTACC CTGCCAATCA
 AGGACAAGAA GTTGAATACT TTGTGGCAGG TACACATCCA TACCCACCAG GACCTGGGGT TNNTTTTGAC AGCAGATACT
 AAGTTCNGA GGATGCCAG TGATCAGNTG CACAGTCTTA GCGTGGC

SEQ ID NO:1114: (Length of Sequence = 268 Nucleotides)

GGCGCCAGG TGGTGCCATG NTCTTNTGIN CTGTGCGTGG GCGATGTGG TCATCAGCCT GAGACCCAGA TAGGCTGAAC
 CCCGACTGAT GTAGGTTGCG CACAGGAGGG ACGGAGATCT TGCCCTGGGCA GGACGCGCGG GCGGAGCGC CACTCCCTGG
 CTGGCAGGC ACCATCACCT CGTGGACGGG CCCGINATAC AGCCCAAGGG GCACACCGTG GNTCTNCGN CAGCCTGTTG
 CGAGCTTTGA TCCTCTTGTA GACAAAGT

SEQ ID NO:1115: (Length of Sequence = 342 Nucleotides)

ATCAGTGCCT TCTTCAGCTC TATCTGGGAC ACCATCTTGA CCAAACACCA AGAAGGCATC TACAACACCA TCTGCCTGGN
 AGTCTCCTG GGCCTGCCAC TCTTGGTGAT CATCACTC CTCTTCATCT GTTGCCATTG CTGCTGGAGC CCACCAGGCA
 AGAGGGGCCA GCAGCCAGAG AAGAAAAAGA AGAAGAAGAA GAAGAAGGAT GAAGAAGACC TCTGGTTCTC TGCTCAACCC

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GAGTGAATTGG TCACTCTATT TATGACTCAT AGCACTTACA GGCTACTTCG GCAGGGACTT NGGGTACCCC TGTTCTTGGA
 TGGCACATCA TTATCAGCAA CAGGAACAGT TTCTCTGAGC CTTGGGCCCT GGAGAATCTC TAGCTTAGCT ATTTTAGACT
 TGGGGTCAA GAAGAGAGGC TCTTTGCCAA CTCAGCAACA

SEQ ID NO:1104: (Length of Sequence = 400 Nucleotides)

GGAAGCAAGA CAAAAAGGA CAGAAAAGCT GGTTTAGGTC TTCAGTATGT TTATTTGTCC CTCACATAGC GGCTTGATCT
 GTCTGCCTGT GTGTTTACAT AGTTAACCAG AAACGCTAGG AGGAAGTTGT ACCAGTGGGA TACCTCCTTA GGTGCCAAG
 TTTTATTTTG AGAAATAATA TTACTTTCTT CTTCTGAAAT AAAATAATAA TAATANGANT GAAACCCCCA AACCACAGTG
 TGAGTCTCAG GTTAGCATTT GAAACATCT CCAGAGACAT TGTTATTCCT CAGGAGGTTT CCTGACTCC TTAAATGTGG
 CTGATGTTTC ATGGTTAATT TATTTANTTT TAATAAGGTA TGAGCAATCG AAGGGGCTGA TCATCTGAGG TTTTGTACCT

SEQ ID NO:1105: (Length of Sequence = 380 Nucleotides)

CCCAGTGCAG AGGGTGACCA AGCCTGGGAA GGCCCCAGGG GTCCAACACC AAAATTAAAG GTTTATTATA CACAAGAGGA
 CGTTCTGTCC CTCANAGTGG CTGGCCACCC TCCCCACTCT GGCCAAGGTC CTGCACAGAG GTTGTCTCTC AAGGGTGACC
 CTTCTTGGCC GCCCAGAGCT AGACCTCCGG CCGAGAGGCA CGCAGTCCAT GCTGCTGGCA CAAGTCACTT GGCNAGCTNC
 TCAGCCACCG NNTTGGCATC TTGTCTTNA GGTAGGCGCC TTNTTGGCA TTCAGACTTG AGTTCAGCC ACTCATAGAA
 TGGGACGTCC ACTATCAGGA AGNCTGCAGC CACTTATGTG TCGCGGGCC AGAACAAAGG

SEQ ID NO:1106: (Length of Sequence = 334 Nucleotides)

TGTATCTINT TGANTTCTAA ACCCTTGCTT TTCCCACTGC AAATGTGTTT GGCTAGAGAG CAGGCTATTA AGACATTCTA
 GCCAAGCCAA TTTCCTGAGA GTNCTGCAGG TACCAGGTGT TGCTGGAGCC CAGCATCTGC TCAGAGGAAG GCAGAGAGAC
 CCAGAGGAAC CCAGAATGAG ACACTCATTT TTGCATCTC AGTTTCCAAA TTAATTTTNT AGCTCCTGGT TAGGACCOGA
 NTINCAGAGA CCAGGCAGCT NTCCAACAAG AATGCTGACA GGTTTCATTG TCCTCTAGGG TAGCTGCTGN CTAAAGAATA
 TTGATTTTTT TGGG

SEQ ID NO:1107: (Length of Sequence = 346 Nucleotides)

CTCACTTTAG TTGAGTCAA TATCTGAGAA AAAAAGAATG GAGTAAAGC ACAGAAAGCA AACTTAGCT TAGAAAATAT
 TTCTAATTC AAAAAATGAA CAAGTCAGAT TCTGTAAAGA TATCCAGTGA AATCTTGAAG AAATATTGTA TTGATTATTA
 ATTAANCTGA TTGGAAAGTG ATCTTGGGT CACAATGAGG TTGTTGAACA AGTAGCATTT TCATACAATT GCAAACCAAT
 TCAATGTTTT TNCATACACT GTTACATTT CTTTNCAAAA TTTGATTTCT TCTTCGTGAT CTTAGTCAA TTCTGCCTTC
 TCAGTAAATC TTTATCAAGT TTGCAG

SEQ ID NO:1108: (Length of Sequence = 410 Nucleotides)

TCCTGGCGAC GTGGTCCCGG TAGGAGACTT AGACCTGAGC TGGATCTGTT GACCCCAAAT TGTGCTTTTC CCACCAAGAA
 GAAAGACAGG GAGAGAAACA TTAGTACAAG TNCTGAAC TAATATAGCA GAGAAGAAAC ATAATCTCTG AAATCACACA
 GCTATTCGGT TTCAAAGCGT TCTAGCGCC CAGCTCTCTT AACTCCTGGC CAGTGTCTT GACATTATGG TAATACATAA
 AGACTTTGTT TCCGCTGGTG TGTTCTGTG GGAAGCCTCT GACTCACCTC CGTGCTCCAG TAGCACCTG TGCAAGCCTT
 CCAATGTGCG CTTTATTGCG TGGCGGGAA GATAATAGTT TGGATINCTC TGCAAGTCAG ATAATAGCTG TATCCACTTA
 CTTGGCACAT

SEQ ID NO:1109: (Length of Sequence = 352 Nucleotides)

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SEQ ID NO:1097: (Length of Sequence = 406 Nucleotides)

CTGACCTCGT GATCCGCCCA CCTCGGCTC CCGAAATGCT GGGATTACAG GCGTGAACCA CTGCGCCCGG CATGATTGGC
 ATTTTGGGCT AAATAGTTTC TGTCCACAGG ACCGTCTTGT GCAGTGCAGG TCTTTTAGCA TCCTGGCCAC TCATAGTGCC
 CGTGGTTCTC AGTAGAAGCT GTAGAGGATG TTGGGAAATT GGGGTGGGTT GGTACAGTG CCTGGCATCT GTCTCAGGTT
 AAGGGCTTNG GAGGCTCAAG TGCAGAGTCG TATCTGGATG CCAGCAACAC CCTGTGAGA AACTTTCTAC TATGGTATGC
 TCATCATCT CTGAAGATGT CAGGGCTGT TTGTTGTTT GCCTGTTTCT CTCACTTTIG CTTTATAATC AGTTCTTCTT
 TGTGG

SEQ ID NO:1098: (Length of Sequence = 326 Nucleotides)

GGCCCCCGG CCTCGGCTC CCAAAGTCT GGGATTACAG GCATGAGCCA CCGCGCCCGG CCATGTAACA ACTTTTATAA
 AGTTATGATG TGATGAGTTT TGGTGTAAATG TTTTCCCTC CTCTACCTAA AACCTTTCAT GCCTTCCCAT TGCTCTTAGA
 AAACACTCCC CAATCTGAAA CATGACCATT TTTCGTTTIN ACACCCAGAT TGCTCCAGAC TTGGTCAGTT GGTGTCCCTC
 CAAGCTGGTG CTGGTGTCTT TCCGNCATNC CCCTATTAGT TTTGAGCAC CTGGACCAGT AAGGTGTTC GTCTCACTTT
 GCACTT

SEQ ID NO:1099: (Length of Sequence = 342 Nucleotides)

GAAAACGAAC AAGTTTCAGC AGTCTAGCCT TTGGATGACC TATTTGAAA CCACTGAAAG TCGTGGAGGA ATGGGCAAGA
 ACCACCTCAT GATTCTNCAG GCCATTGCTA ACGAACAGCT CATTGCTACA ACCAGTCCAG AGGTTTTTATT CCCTCTACTC
 CGAGCAATGA AATAGACCTG AGTTATGCTT CCTTTTCAIT AATTTCGCA GATAAATAGT TTCCTGAGCA ATGGATGCTA
 TGCCCTGGATA CCACTCTCCA CTTTGACGC CGGAACGCC TTGGGNCAC AGTTACAGAA AAAATGTAAA CTCAGAGTGA
 TCCCTGTGTA TATTGCTATA GA

SEQ ID NO:1100: (Length of Sequence = 301 Nucleotides)

ATCGCTTGAG CCCAGGAGTT CGAGACCAGC CTGGGCAATG TGACAAAACC CAATCTCTAC AAAAAATACA AAAGANTTAG
 TCAGGTATGG TGGCGCATGA CTGCAGTCTC AGCTACTTGG TAGGCTGAGG TAAAAGGNTC ACCTGAGCCC GGAAGTAGA
 GGCACAGTGA GCCATCATTG TGTGCCACTG GACTCCAGCA TAGGGAAGGG GACTGAGACC GTCTCAAAA AATTAAATAG
 AAGTCTTCT TTTTTTAAA TNCGTCAATT CATGAGAAAA CTGCACTCAC ACATAGTGTG T

SEQ ID NO:1101: (Length of Sequence = 300 Nucleotides)

TTAAGTCAAA GGCTAGAAAT GATTAACTT AGTGAAGAAG ACATGTCAA AGCCGAGAGA GGCCAAAAGC TAGGCCTCTT
 ATGCCTAACA GTCAGAAATG CAAAAGNAAA ATTATTGAAG GAAATTAAAA GTGAAACAAC CTTATTGCTG ATATGCAGAC
 AGTTTAAATA TTCGGATGG AAGATCAAAC CAGCCACATT TCCTTAAGTC AAAGCCTAAT CCAGAACAAA ATCCTAACTC
 TCTTCAATT TACGANGGC TGAGAGAGGT AAGGAAGTTG CAGAAAAGTT TTGAACTAGC

SEQ ID NO:1102: (Length of Sequence = 174 Nucleotides)

GAGATCGAGA CCATCTGGC TAACACGGTG AAACCCCTC TCTACTAAA ATCCAAAAA ATTAGCCGGG CGTTGCGGCT
 GCGCTTGIN GTCCAGNTA CTCCGAGGC TGAGGCAGGA GAATAGCGTG AACCTGNGN GGCGGGNTTG CAGTGAGCCC
 GAGATCGGGC CACT

SEQ ID NO:1103: (Length of Sequence = 360 Nucleotides)

ACAAGGTCTT GCTATGTTGC CCAAGCTGT CTCAAACCTC TGGTCTCAAG CAATCCTTCT GCCCTGGCCC TCCCAAAGTT
 CTGGGTATTA CAGGTGTGAG CCAGCACTCC TGGCCCATCA CAGTCTTAAA ACCAAAAGTT CTGTGTCCGA GGAAAACAG

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TAAATACAAA CACGGGATAT ATTINGTCAT AGAAAAAAT GTGTACTGTC ATTATTTTGC ACTTCTGAAG GACTGCAAAC
 ATTTTTCAG CACAATAAGC AAATCTTCT TTCAAAAAG NATACTTING CACATATGTA AGGTTTGGAA AATGACTAGG
 NCCCTAGGGA G

SEQ ID NO:1092: (Length of Sequence = 349 Nucleotides)

AAAGAAAATG CCTTGGGAAG ACAGATGCAT TTTTCCCCAC TGGTGTGCA ATTGCTCAA TATTTINAGG ATGAATATCC
 TCACCTTGA GCGAAGTTTT TAAGAGTGAA TTGAATTAC TGGAGCAGTG AACAAATTATT TAGAGTCTGG TATAAGTGAA
 GAAAAGAATC ATGACCTGTA AGCTGTCTTG NAGGTACCAG CAACTGCTCT TAAATTTTA TATGGAAAGG CAAAGGGGTT
 AGAATAGCCA ACATAATACT GNAGAAGTTG GAAGACTCAC ACTATCCAAT TTCAAGGTTT ACTGTAAAGC TACAGTAACC
 AAGGCAATGT GGCCTGGTG AAAAAGTAA

SEQ ID NO:1093: (Length of Sequence = 400 Nucleotides)

GGACCTTGTT TTACATTCTG GATTTTCCTT TTTACTTTCC TAATGATGTA ATTAACTINC TTCTGTATT TNCCATATTT
 CCTATAAAT GGTAGTTAGA TCTAAAAGCT TGATTTACTT ATTTTCAGATT TCTAGTCAAG GGTACTCAAT AGATTGTATT
 TCCTTTTGCC TCACACGGAG GTGCATAATG TCTGCCTGGC CTGTAGTGAT GCTAAGGTTG ATCATTCTGT TCAGGTGGCA
 TCAGTCTGTG ATAATTCTCT GTAAGAATCG TTCATTAAAC TTTCATCTAA TGGTCCATT CATTCAATGAT CTTTAACTGA
 ATCCCTGTGA TTTCATTAGG GAATAGCAAA ATAATGATTT TCTAATTCTG TNATTCTTT CACATTTATT AACTGTAAAT

SEQ ID NO:1094: (Length of Sequence = 414 Nucleotides)

GTCAGTNTC CATAACTGTT TCTGCTGAC AAAGGGGAC TGGTATGGT TCINTGGGTC TTGGCCTCTT GCTAGCTGTC
 ACAGCAGGAG GGTGGCTTIN TGGATTGGTG AAAGTGGTAT CCAGCCAGGT CCAAGAGAGA CAGGGGACAG GTTTTNCCTA
 TGCCAAATAT ACTTCAGCAG TAGAAGCCAC AAGATTACAT TATTAAATTG TCCCAAGAGT CCCCAGTGC AAACCCAGC
 TGAACGCCAT TTAGTTATAT NCTGGTGCTT TTTCTTCTG CAGGAATCA AACCAAGGTT TCTTATGTGT GCTTGAGTTG
 GGGGCCAGAG TGCAACTGG TAGAAACTA TGTTATTCCC CAGCTANGAG AACAGAGGGG AGGGGTACAT GATAGTAGGG
 AGTCAAGTTT ACAA

SEQ ID NO:1095: (Length of Sequence = 387 Nucleotides)

GATCTGGCAA CCAATTATGT AAATAGTCAT ATGAATCCIT CAGAATGGAT AACACAGCTT TNCTGACTGG TGTGAAATAG
 TTTTCAGGTG CTCATTCTTT ACTTCATTAG CTTATCTTAT ATCATTAGCT TATCCTCCAT TCAGGTATAA CAGATCTTTT
 TTTTCGATA AATATGGCAG TTTAGGGAAA TAACTATGG CATAATATGC TAGGCCATT TCTAGGCCA CGCTCTTTG
 ATTGTAACTT TAAACCTTT ATCAGAACCT AAACAACCTT TCAAAGATC TATACATATT TNNATCCAAT GTTTAAGGCT
 ATGAGTAATT CATTATGGTC ACTCTTCATT TTTTTCACCT GATAATGATC TCGNCAAAA TGTGAG

SEQ ID NO:1096: (Length of Sequence = 416 Nucleotides)

AACCTAAAGC TTTAGAATGA TTGAGGTAGC TCAGAGCAAA AACCAAAAGG AAAGGTGATA TGTAGATGTC TGGGCACTCA
 CATCATAGGT TTGGATAGCT AGTTTAGGAG TAAGTGAAAC ATTTTGAAG AGCATTATG TTAACCTTGA CAATAGGATG
 GGAGATTCTT AACCCCCCTT GTAATATGCA CGATTGATT CTNAGTTAAA ATACACCACA GTGACAGTGA TATCATCCCT
 GTACATCCTC GCCAAGTCCT CTGGCAATGT CAGCATCGCC GNCAGCCGCT CTGCCTCCAT CTCCCCATAC TCATTGTTC
 CGATGGCATG TCTGATCAGC CGGTGGCTG CATTFTGGTC AGCCTCGTGG AGCCCGCTGG CTTTCTCTG CAGCAGCAGG
 CTCGTCAATG AGNCCC

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TTCTGATTAT ATTACAACTC CAGCTGGTGA CAAGATGGCT GTGTAAATCT TGAAATCACT GAGCATTTCAT TTTAGCTTCT
 CATTGAAAGG TAGATATTCA GTATGAATIG TAAACTGGCA TTAAGGGAGA AAGTAGGNAT AATCAAACCTT GATCTGAGAA
 TTACTTGCTG GTGCATTTCC TCAATGCATA GTAATATCCT TATGANGATG CAGATGCAAA AGTGGGTTTTT GGAGGTGGAT
 AAGGAGGGCA GCT

SEQ ID NO:1086: (Length of Sequence = 277 Nucleotides)

TGGATAGCAT GAGGCAAATT GCCAGAAGAG AATTTCTTTC GCATCCTAGT AGAATAAATC CAAATTATCT TTGTGGTACT
 GAGGATGTCT GGTITAGCAC AGTGTAAAGT TGTAAACACTT TAACAGGCTA TTAATTCACA GTCACATAATT CAATGCTTGC
 CCGGAGTTTTT GCTAGAAAAG GATGAGAAGG ATTAAGGTAA AAAAAAAAAA NAAAAAAAAA AAGATAAGGT TAACCAGATA
 CATCTTAAGA GCTGATTGCT CTTCAATCCC TAACTCG

SEQ ID NO:1087: (Length of Sequence = 360 Nucleotides)

TTTTTTTTTT TTTTTTIGAG ACATTGTCCT ACCTGGCTGC CCAGGCTGGA GTGCAGTGGT GCAATCTTGG CTCAGTGCAA
 CCTCTAAATC CCAGGTTCAC GCGATCCTCT CACCTCAGCC TCCGGAGGGC NTGGGATTAC AGGTGTGAGC CACCGCGCCC
 GGCAGCATT TTTTTTAAAG ATCTGTGATA GTGCATGTTG TGCTAGTTCT TTAATACAGA CTATATTGTA TTCCATGTCA
 GTTTTTAAAG TTTATTTCCC TATTGATGGC ATTTAATTCC AACTTTTAGA TAAAAGGATG TACTGGACAT TTTTATAATT
 TTTTGGGGG ACCATGTAAG AGTTTTTCTA GGGGGAATTC

SEQ ID NO:1088: (Length of Sequence = 209 Nucleotides)

CTGGGACCAG CTGGAACAGA AGTGGTAAAG GATAACTAGC TACCTGCACC GCCAGAGATC AGGNTCAGGG TGAAGCTGGT
 TTCCAGCAG GCGAAGTGAA GGAAAGTGGT TNGAAAGGAA GAGGAGGAGC AGGAGATGGT AGGTCCCTCG CCTNTCTCCC
 NINCTACCCT GGAAATATAA GTGTCAGGTT CATACTTAAC CACCCCTT

SEQ ID NO:1089: (Length of Sequence = 409 Nucleotides)

TTTGTCTCAC AGCTACATCT TCAGAGGTGA GAACCATGCA TGACACAGAG AAGATGCTCA CTGATGGATT TAATGAGTCA
 AACATTGAAG AATCAATGAG TGCCGGAAAT AACACAGGATA GGTGGCAGCA TAGCATGCC CTTAAGANCA GGCTGTGGAT
 TCAAATCCCA GACCAATCAC TGANTTTCAA GCCACTTTGC CTCTCTGAGC CTCTGTTTTT TCATCTGTCA AGTGGCAATA
 ACAATAAATG GTACGTGCCT CATAGGGGCA CCTTGAGGAT TAAAGAGAG GGTTCATAA AATCAAGTAC TGATTTCAAA
 ACCTGGCACA TAGTAGGCAC TCAGCACATG GNCCTTATAT ACTINTGGGC CAGCAGCGGC TGGGGCTCAT CCTCCCTGG
 CTGGGTCCA

SEQ ID NO:1090: (Length of Sequence = 337 Nucleotides)

GAACCTNTCC CCATTGGAGA GGATGAGGAT GATGATCTGG ACCAGGAGAC ATTGAGCATA TGTAAGGAGA GGATGAGGCC
 CGTNAAAAAG GCACTGAAAC AGCTCGACAA ACCTGACAAG GGGCTCAACG TGCAAGANCA GCTGGAACAC ACCCGGAAC
 GCCTGCTGAA AATCGGAGAC CGGATAGCCG AGTGCCTTAA AGCCTACTCA GATCAGGAGC ACATCAAACCT CTGGAGGAGG
 AACCTATGGA TTTTGTTC CAAGTTTACA GAATTTAATG CTCGAAAAC GCATAAGTTA TNCAGATGG CTCATAAGNA
 AAGGTCTCAA GAAGAAG

SEQ ID NO:1091: (Length of Sequence = 411 Nucleotides)

CCACTACCAC AGGAAATCTC TATACCCTTC TTGGCTTTTC CTTTAAATGT AATTTCTTA AAAGCTTCAA GATAATTTT
 AATCAGGCAT GCTGAAATCT ATCTAACCTA TTAGTCACTA ATTATATTCT TCAAGCCTAT ATATTAAATG TTCNTCTGT
 GTAAATTCAT GATCATAAAG TTTTGGACCT GGCCATCAAT ACTAAAGCAC TGATATTTAG TTTTAGGTGA TACTTGGGCA

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SEQ ID NO:1080: (Length of Sequence = 419 Nucleotides)

CTGAACCTCCC TGAAAATAGG AAGTCTCAAT TAAAAAATCA ATTTGTCATA GTCCACATAA AGATAATCAA TACATTTTGC
 TCTCAGTCCT TGGGATGGTT TTTGTAAATA ATATTATCTT GACAAAAACA AACAGGAAGA TCCCACCCCC AACACATACC
 ACAATCCAAT GTTACCTGGN ATTAAAAATAT ATACCAACAT GCATCTTTAG GTTACTCTGG TCCATGGTTT CCTCCAGTGG
 CAATGGAATT TACAAAAATG TAAGACGTAA TAGATATATA ATTATCTTTT TNCCTAAATG AACTAGCCT TAAAACTGG
 TACATAATGG TTCCTGGGT CANIGATCAA AATTATGGAN GTACACTTAA CCTATCTTCC ATTGAGTGGC TTAAATGGG
 ACCTTAAACT GTGGACTCC

SEQ ID NO:1081: (Length of Sequence = 411 Nucleotides)

CAGCGTTTAA ACCAAAGGCG CACTAAACCT CGTAAGCGCA TGANCAGATT TAAAGAGAAA GAAAACTCTG AGTGTGCCTT
 TAGGGTCTTA CTTCCTAGTG ACCCTGTGCA GGAGGGGGGG GATGAGTTTC CAGAGCATAG AACTCCTTCA GCAAGCATAC
 TTGAGGAACC ACTGACAGAG CAAAATCATG CTGACTGCTT AGATTGAGCT GGGCCACGGT TAAACGTTTG TNATAAATCC
 AGTGCCAGCA TTGGTGACAT GGAAAAGGAG CCAGGAATTC CCAGTTTGAC ACCACAGGCT GAGCTCCCTG AACCAGCTGT
 GCGTTCAGAG AAGAAACGCC TTAGGAGGCC AAGCAAAGTG GCTTTTGGA TATACAGAAG AATATGATCA GATATTTGCT
 CCCTAAGGAA A

SEQ ID NO:1082: (Length of Sequence = 350 Nucleotides)

CTGTGAGGGC ACAAGTGTAG GTATCTTINC AAGTTCTCTA GGTGATTCTA GAATGCAGCA GGGTTGAGAT GCTCTGCCTT
 AGGGGTAGAG AGGTGGGAAC ACTGACAGGT TCTGCAAAAC ATCTCTGAAC AGCTGCTGGT GTCTTTTCT GTACTTCAAG
 TTTCAAGGCA CATCTGATAG CTGTNCCGAA AGGGAAGAGA GAATTACGTG GGCTAGGCTG GTTGAAGGT TTGCTAAGN
 TTTGCTTGA GCGACTTAA CAGTTTATT TCAAAGTAAT TTGTGTTGT AGCCCCACTA AAGTAATTTT GGGCCAGNAA
 AGGTTCAAA TACGGTTTTC CCTACTTAAG

SEQ ID NO:1083: (Length of Sequence = 430 Nucleotides)

GTGAAGTCCA CTGCTTATG GACAGCCCAT TTGCATGGG CCTGCGTGT GGTGCAGCC AGGGTATGTN AGGAAGGCCT
 CANAGGAGCT GCTGCTGCA CAGGTGGTCA CCAGGGCAGA GGTACACTG ACATACCTCC AGACCAGCCC GCTCCACTGT
 GGACAGGGGC AAGINACATA CCTGCTGTT ACCATGGGGT CACGGCAGAA CCTGTNTCAC GGGGTGCTTT GTGATGCCAA
 ATGGATATAG GTGGGACGTG CTGGCAGCAG CGGCCTCAGC GTGAGCCAT CTCCCTCCC GTTCTGCTCC GGCTGCCTG
 TGGGCTAAT GGTGGCACCG TTTAAGCANC TGCTGTGTG TCAGCCTGGG GGNCTGAGGG TTTCCATACA TGATCACTGG
 TTCCTACCA AGGCCTTAAT TCCCTNCTGT

SEQ ID NO:1084: (Length of Sequence = 369 Nucleotides)

AATGGAAGAA GTGAAAAGA ACAACACAA GAAATAAAG AAGTAACCTC TTTCACCCAC TGAAATAATC TCTGAAAAG
 ATATTAGCAA TCATGCAGCT TATAAATATC TAAAGGGCTA GAATTGAGGA ATTTATAAGA NTAANTTTTT TTTCAACAC
 ATAAAATACA ACATGGGAAA TAAGATGTTT TTTACTAACA GGCAAACT TGAGNGTCC TCTTCAAAGA CTACAGTGA
 TGAAAGACCA GTTATCCAAA GGAAACGGTT AGTAGAATA TAAAGTTAGT CCCACACAA ATTAAATGG TGCTCAATGC
 AGATTATCTA TCATTANACC ATTTTAAAG GCAATTNIT ATTTAAAT

SEQ ID NO:1085: (Length of Sequence = 413 Nucleotides)

ATACCTTNA GCTGGCATAA TTTAAGTTC TAATTATCCC TTAATCATAA GCTGTACGAT TCTATAATTA AAAAGTTAAT
 GCCTTCTTAA TGCTATNCT AGTAGAAGAA TGATGAGAAA ATAATAGTAT AGATTAGTTT TGGTCTCTAC TCATTTTGCC

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SEQ ID NO:1074: (Length of Sequence = 379 Nucleotides)

GGTTAAATTC TCATCGGAAT GTATAAGCTT ATTTATTAGT GTATTTAATG GTTCATCAAT TGATAAAACA GGTGTAGCAA
 ATACATGCCT TCCPTTTGGG GGATGGGCCT GGTTAATCTC CAAATTGGCC GTTTGGAACA ACTCATCAAT ACTGTACAAA
 GAAGGTACCA CTGGGTGGGA ACTTTCACIT TTTAACAAAA CTGGTTCATA TTTCTCACTT GCATAGGAAA TGGTCAAACC
 TTGAAGTGAA GCAGAGTGCA TATGAGAAGT AGGCGACACA TCAAAAACTG GTACAGATGT AGAGTGCAGC ATGTTTTTAC
 TTGAAGCAGA ATTTGATACA ATGAGGATGC AACCATTGTA GANCTAAATT TATCAACTT

SEQ ID NO:1075: (Length of Sequence = 345 Nucleotides)

ATTAAGTTGA CAGTCCAATC AGAAATATTT AAACAAAGTT TCACTACTTA AACACCATCT AAATATACTT TTTGTTATAT
 TCCCAGCAGA AATTGATGGC AAGGAATCAT ATATCCCATC AAAACCGTAT TTTTCCCCCT AAAAGGCAGT TTAGATGTC
 TCATTCTAGG NPTTCCATCT CTCCTCTCCA CCATTCCAAT TCCCAGAGTA CCTCTACAAA TATCCCTGCT TACCACTAGA
 NCTATTGCT TTAACAATCT TCTGTGGGT AAGGAGATGC ATATGCCAAT GTGAAACTA TGGAGGGGA CTCCTGCCTT
 CAAAGGCTGA CTAGAAACCA TTGA

SEQ ID NO:1076: (Length of Sequence = 286 Nucleotides)

TTTTTTTGA GATGGAGTCT CGCTCTGTCG CCCAGTGTGG AGTGCACTGG CATGATCTCG GCTCACTGCA AGCNCGCCCT
 CCTGGGTTC TGCCATTNTC CTGCCTCACC CTCCCGAGTA GCTTGGACTA CAGGCGCCTG CNAACCGCC CAGCTAATTT
 NTNTGTGTG TGTTTTTGGC AGAGACAGGG TTTACCATG TTGGCCAGAA TGGTCTCTAT CTCCTGACCT CGTGATCCAC
 CCGCCTTGGC CTCCAAGGT GGTGGGATTA CAGGCGTAAA TMACG

SEQ ID NO:1077: (Length of Sequence = 366 Nucleotides)

TCACATAGGT CACATTTTAC CCATGAAACC TTTCTAAATT ACCTTTTGCA TTNTTGCCT ATCCTTCTAC ATCATCATAC
 TTGCTCAATT AAAGTCACTT TTTGGGTAA CATTTAGAA ATTGGGATTC CTCTTACAAT TGCTATCAGA CAGAAGCCAA
 TTATGATGTT GTCATTGCTT ACACATGGGN AAATAACAAA ACTGCCAGCA TGACATTTGC ATATGACAGT CAACAGCCTG
 AAAGAAATTC CCAGAAATGA TACTGGAGCA TTCATTTTAC CCTCTAGGAN CCAATGGAC TNGGAAGGAA GTAGAAGATG
 GGAATCCCT AAGCAGCAGT CAAAGTAGGC TGGCTTTTCA TAATT

SEQ ID NO:1078: (Length of Sequence = 380 Nucleotides)

GTTTAAGTGC GAAGATTTTA TTAGGCGGTA CAATTCCAAG GTGGTAAGGG TGAAAGGAAA GGGAAGGCA GGCAAATACA
 TTATTGAGCT GAAAACAACT TTACATTCAA GGACAGCTTC CAGACAAGCC ATGTAGAACC AGCATGCCTT GGGACTGINT
 GGATGGCAGG GAGACGAGTT TCTATGCTGA CCACTTCATG CTTTCTSCC CCTTTGGGA AAGTATGCCT CACGGACCTC
 TAACCTCTCC ACTTCTCTGG GGGCAGCACC TGACCCCTCC CGGCAACTNC TAGGCAAGAG CATTCTGTTT CTTCAAATTT
 YTCACCTGAG TCTGAGTCAG AGCATYCCAT CATCAGAGCC TCTGTCAAGG AGGCAGTGT

SEQ ID NO:1079: (Length of Sequence = 439 Nucleotides)

CTTAAGTTAC TGAAATGAA ACACCCCTTG TCCITCTCGG CGGGGGCTTC CTGGTCTGTC CTTTACTTGG CTTTTTCTCT
 TCCCGTCTTA GCCTCACCCC CTTGTCAACC AGATTGAGTT GCTATAGCTT GATGCAGGGA CCCAGTGAAG TTTCTCCGTT
 AAAGATTGGG AGTCGTCGAA ATGTTTAGAT TCTTTTAGGA AAGGAATTAT TTTCCCCCT TTTACAGGAT AGTAACTTCT
 CCACAGAAGT GCCAATATGG CAAAATTACA CAAGAAAACA GTATTGCAAT GNCACCATTA CATAAGGAAC ATTGAAGTGT
 TAGAGGAGTG CTCTTCCAAA CAAAACAAA ATGTCTCTAG GTTTAGTCAG AGCTTTCACA AGGTAATAAC CTTTCTGTAT
 TNAATCAGG GTAACCCCTT TCTGTATTTG AGTGCACTG

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AGACACTAAG AGTGCCTGG GCAGGTCGA CTGCAGGTGA TGCAACTTGC CAGCCGTGGT

SEQ ID NO:1068: (Length of Sequence = 412 Nucleotides)

TGGCCAGCAT CTGGGAACCT TGGGTGTGTG GACCAACTTC TTCCAACACG TGCGCACTGA TGGCCGGGGC CCCAGCCAGG
CCTGNCCTGA AGGGTCTTCC CCGNCCCGAG GGACTGTAGG GGGTCTCTAG GAAGCATCAC ATCAAGGTCC TCAGGTTAGA
TNCAGNCAG CCCATTGACC CATTINAGGG GACAGCTGGA GGAAGCCCG GAGTCCCTTG TTTCTTCAGC TGAG

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TCGCTCATGA AGATAATTTA ATGCTAGACT GATTCTGCA GAGTAAATC TGGCATGINC TTCAGGAAGT TTTCTTTGTC
GCTGCATATG AAACATTAGG TCTCTCCAT TTACATACTC TATAACAAAG AACAATCTGC TTTCTGTCTG AAAGCAAGAA
TGCAGCCTAA CAAGGAAAGG ATGATGGAT GCTGCTCAA ACACATGCTT CTCGTCTGT ACCCAATCAA TATCCTCATC
ATCATTACA AGCTCTTTT TCACAACCTT CATGCTATA ATACGATCTG TTTTTTTTAA TCGAACCAAC AGTACTTTGG
CATAACTTC TCTTCTATT ACCCGGAGCA AATCAAATC CTGAAGACCT AGACTGGATG AAGCTTTGCA CTTTCCCTGG
NGTCATTGCC TC

SEQ ID NO:1070: (Length of Sequence = 358 Nucleotides)

GTGATTGINC CACTGCACTC CAGGTGGGT AATGCAGCGA GACTGCGTCT CAAAAAATAA ATAAAAATAA AAAAAAATAA
AAAAAATAA AAAAAAAG CACCACCGCA CTCCAGCTG GGCAATAGAG TGAGAACCTG TTTTCCAAA AGAAAAATNT
TAAAAGANTG ATCTNGGCCA GCGTGGAGG CTCATGCTTG NAATCCAGC ACTTTGGGNG GCCAAGAACA GGTGGTTTAC
TTGAGNCAG GAGTTCGAGA CCAGCCTGGC CAACATAGCA AAACCCCAT CTNTACTAAA ATTACAAAA GTTAAGTGG
CATGGTGGTA CATGCCCTNG TAATCCAGT TACTTCCG

SEQ ID NO:1071: (Length of Sequence = 411 Nucleotides)

CTATTTATGA ATTCTGCAT TGGTTTCGAA AACTCAACAC AGTTAAATGA ACAGGAATTG AAGGTGCATG ATGGATGCGT
CCCTCATAGC ATTTAAATCT CTCCACTTG ATTAATAAT CCTAGTTCTT CTTCCTGAA TTGTTTAGAG TTTTINAGCA
GCCTCTGCC TGAATAAAC AAATTAGCAT CAAAGATCCC CTGTTGAATG AGAAATCATT AATTGAGAAA CATGCATTC
TCCTTAATTA CTTTGTAGAAC AGTGAGAGAA CAAATAATCT CAGGTTCAG AGGGCCCTGC CTGCTCTGCA CGGTGAATC
ATTTCTGTGA GCTGCTGGA TAAACTCAA GTAGGCAAC ACTATTGGG GAATATCAAT GCAAGCTTTC AGTAAACACA
CTGTAGGATT G

SEQ ID NO:1072: (Length of Sequence = 342 Nucleotides)

TCCCATTTTT ATAATTATTG GAACATGAAA CTGTATTTCT ATGAACTCAA TGATTTTTTT CCATAAAATT ATATGCTAAG
AGAGTCACCA CAAACTATG AATCTCTCC CGAATTATTT TTGCTTCTTT GGAGCACCAT AGTCTTTGTT CAAATCACAA
CATGAACTG TTGCTGCAAT GCTAAAGATG TGAATCCACC ACTATCAATA CGGTGAGGT AAAACCTGGA GCCACATGTT
ATTCAAGTTA TTTTGTAT CTAAATGATT ACATGAAAT AAAATAGTAA GCCAATATTA AATTGTAGG CATAGTTGCC
CCACCTNAAA AGTGTTTACA AA

SEQ ID NO:1073: (Length of Sequence = 217 Nucleotides)

GTTCCTGTC CTGGCTAGGA TAATGCAAGC NCTTTTCAGA TGANTCAGAA TCGAAGAAAA TACGCTGGTA AAACAGGACC
TGATTTACCA GGNACTAAAC AATTACACTC CCATTTCCAT TGCTTTCAAT ATTTTCACAC GNTACAGAA CCTTTAAGAT
GGAAAGGGAA AGCGATTTTT TTTTCAACAA GTGGGCCACC AGATGAACCA AATTAGA

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TGAATGGTTA ACCAACCCT AGGCTACCAC TCIGTATTTT ATCAGGGGTA GGGGTATTAA ACCCCACATG CAAGTAAGGA
ACCCCTGCCC CCAGTGTGCA AATGGGATGG GGATGCT

SEQ ID NO:1061: (Length of Sequence = 206 Nucleotides)

AGAAAGTAAG ATTCTCAGGG CAACAGTGTG CAGCAGAGTG GTTGCTCCAC AGACAGAGGA GGGCAGAGTG GCCCAGAGTA
TCAGCGTACA GCAAAGTGGG TGTTCCTATC CACAGGGGCA GCGCTATCTC ATAGGANAGA ACAACCCCTA GGAAGGCAAG
CGTCAGNCAG NCAGCAGTGN AACAGTCAAC AGTTAGCCAG TGTGAG

SEQ ID NO:1062: (Length of Sequence = 316 Nucleotides)

TINCCCTCAC AGAGTTTTAG TTAGAATCAC TTCTCTATT TCCACAAATC CTCTTTTCT TTCCTTTTAT TTCTTAAAGT
GAATGTCCAA GCAAAAAGGA AGCAAAAATG GTCAAAGATC TCTCTTACAA TATAGTAATA AATTTATNCA AACAACTTGG
AATTCACCTT GTGCATTGAA AATNCAACTC CACACTGCAA ATTATGGCAT TTTTCCCNCT TCAAAGGAAT TAGTGAACCTC
CATTGGATGC ATTCTACTIN CTGTTTAGGN AATAAGGGAA ACCGCTTTGT AAAAGTNCAT CATGGCCTAG GAGTTA

SEQ ID NO:1063: (Length of Sequence = 314 Nucleotides)

ATGATCTGGT TTATGCTTCA GAAGAAGCAT AGTAGCTTCT ACAGAAAATA AATGATAGAA GGCAAAAGAG AAACATGGCG
AGTATTCAC TCCAGTGTCT AGTCAAGAGA TTACAAGGCG CTGGCATGA GGACAACAGT AGAAATNGTT AAAAGTGTAC
TGGATTGCAA AATATTACTT TTGGGCCAGG GCGCCGGNGG .ACACGCTT ATTAATACCC AGCACTTTNT GGAGGTGCAG
GGAGTTNCGA GTACCACTCC TGGGCCAACA GCGTGGGAAA TCCTGTTGAA AAATATAAAA ATTAGCCGGG CCGT

SEQ ID NO:1064: (Length of Sequence = 322 Nucleotides)

GAAAGCATTT GAACTAAGTN TGTAAAAATG GCAGATAATA ATTAACACTT GGTAGCAAGA AACGCTTTCT GAAATACTGG
GAACACTGAC TTGTTTCACT GTAACCTATC ACCTAGTGCT GTATCTGCCA TAGTGCTCAC AATTGCAACT TTATATCCAA
CATGGGTGTT CCATTTCTAT TTGGATAAAA TTACTGGAAT ATATACTAGC AANGAAAAAC TGGTCTTAAA ATGGCAAAG
GCTCTGGCAC TAAATTCCT GCTACTTAAC TTAGTTTACT AATTAACCTC CTTAATTATA GTTTTCCAAA TCCGATGCA
CG

SEQ ID NO:1065: (Length of Sequence = 297 Nucleotides)

CCCTGNCAC TCCTTGATG GACTGATGCT GGAACCTGGG TCAGGGAGCT CCAGGAGGAA CCAGACAGGN TCCTGTTAGC
AGGCTACCA CAAGTTCTAA AGGGCACCAG CCTTGAGAAG GGCAGTTGGG ATGTGGCCAA ATGTGAAGCC AGGTTTNCCTG
GGATCCTGAC TGTCCAGST TACAAGTTC TGGCCACTCT GTGAACCTTG GGCAGTTAA CTTCACACT CTTTACAAGT
TCCCTAATCT ATNAGGAAAC ANTTAGTNAC ATGACCTTCA TGGGAATTTA TTTATGA

SEQ ID NO:1066: (Length of Sequence = 267 Nucleotides)

ACAATGGGAC TGTGAGGCA GCCAGCTCCT CCCTGACTGC TCCACAGGAA GAGCCATCAA CAAAGCCAT CCCTGGAGAT
AGGCTCTGAA ACCAGGATAG AGACTCCTTC AATGGCTGCT GNTGGTTCCA CCATGTATCA TCCAGAGNAA TCACCTGAG
TGGGCATAGG TGGGCTGGG AATCTAGGCG ACAGCAATTC CACACATCTT CACCTAGAAA CCCTCCTTCT GGGTGGGCT
GCATGGTTTC ATGCTGTAA ATCCAG

SEQ ID NO:1067: (Length of Sequence = 220 Nucleotides)

AAAATGCAAT TGGTTTGTG CTGAGTACTA TTCGTGGGAA GACAGCATCC TGNACTCCT CTCTACAGAA TATTGGGAGT
AAAAATGAAT GTCATCCCG GTGGGAAATA TTATGGGGG TTGGAAGCAC AGAGCACAGG AAAAATTAG TNCAGGAAAC

CGTGGTCTTG CCTGATATC AGGAGTGGGA GCGCAGAAC CTTGCCTGT GAAGTGTTAA CAGNNICTTT AAAAGGTGGG
TGGCATCTGG GAGTTTGTTC CATTTCCTCC CCAGTGGGG

SEQ ID NO:1053: (Length of Sequence = 195 Nucleotides)

GTTGCAAAAT TGTATCCCA GTGTGGCAG GTGGGGTCCC AATGGGAGCT ATTTAGGTCA TGNAAGGTGG ATCCCTCATG
AAATAGATTA ATGGCCCTCC CTTCCAGGT AAGTGAAT NCTCACNCTG TTAAGTTCCC ACTGCAAGAA GGTTGTTGAC
CAAAAAGAAG CCNCGTGCT CCCCCTAACC CTGA

SEQ ID NO:1054: (Length of Sequence = 319 Nucleotides)

ACAAAACCAG ATGTTCTCAC AAGAGCCCT GCTTCAGAT CACTTACATA GTTTTGGGG AAGCCAAGAT CGAAGATTTA
TOCCAGCAAG TCACAACCTAG CAGCTGCTGC AGAAATTCAG AGTTCAAGGT GCAAGCTGTC TCAAACATTG CAAGCAAAAC
ACACAGTACT TCCAAGTGT ACAAGAGGAG GAGTGCAAGA GGAAGAGGT CGCTGAAACA GGTGTTAGTA AGTTNAAGGT
ACATAGANTT GGTTCATGTT CACAAGCAAA TGTGTTGAG GGNCAAGGN CAGTTCCGAG CCTGTAGT AACACAGT

SEQ ID NO:1055: (Length of Sequence = 205 Nucleotides)

AACTCAAATA GGAGCTAAAA AAAAAAAAAA GAATCAATGA AACAAAAAT TAATTTTTG AAAAATAA ATGTATAGCA
CTAGCTAGAC TAACCAGCAA AAAAGNTAG CAAGTACCTA AATGAAAAC TGAATGNA AAAAGGAGGA CATTACAAA
TNAACACAGG AAATACAAA GTTCCATGCA GCGAATTAT TCAG

SEQ ID NO:1056: (Length of Sequence = 165 Nucleotides)

TGCAATTA TGATTTCTGC TTCACCAGAT TGGTAGAATG TATAAGATGG TGCAATGGGA AGCATTTAAT ACCCAACAAT
ATCTGATTAC ATTGAATCA CAATGGCTC CTAATCAAT VAGTAGGTT ACTGTTGAG CTGVA AAC TTTGAAATA
ACTG

SEQ ID NO:1057: (Length of Sequence = 203 Nucleotides)

CITTCATTCA AAACCATCA CAGAAATGA CAGCTGGGT CTGTAACAA GCATTCATGT TTTAGAGCAT AGGTCAGTAA
TTGTATATGA GAGCATACAC TGGCTACATA CAAATTAAT GTTCAGNNCC ACACTTTIN CAATGTTAA AACAGGATNA
AGCCTTCCCT GTGAAAAGCA GCACCTTGT GAACGGTTCT TTG

SEQ ID NO:1058: (Length of Sequence = 201 Nucleotides)

AGTGCAATAT GCACATTACT AAGCAGAAA AACAGTGTA ATTCAGAACT ACTTGCAATT TTTTATGTA AATGCCAATG
AATTATATG CTTAGTTTT ATGAACCTGN CTNCTCTG TGCAATTCCT TCCTTGCAA TGAATTGACT TNAACGGCT
NAGTGAATAG CTCAGNCTG TAGGATGTC TTTCAATTT T

SEQ ID NO:1059: (Length of Sequence = 176 Nucleotides)

CCCACTGGC TACATACATG TTTTCAAAAT TAAGTTTTCT GATGGCTCAT CATTGCCAT CTCTCAAAT CCAGGTCTT
TTAAAAATCT ATGACCTGG AATGAATGTG CCAGAAATACC TGTATCTGG AAGTCCATGC GAATNTGGC NTGACTGCC
ATCCGCCATC TGCTGG

SEQ ID NO:1060: (Length of Sequence = 277 Nucleotides)

GTCAGAGCA GTGTACAGT ATTACAGTCA GCCACAGAG CTGTGTGGG GGACAAGACC CAATCCCTCC CCACACCAGG
CAAAGCAGTA TTGACATGA GTGGCATGT GGCTGGGCC ACGTCTTAT CCCCAGGNC CTGNGGGAG ACCACCTTC

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CCAGGTGCAA TCTGGGCTCA CTGGGACCTC TGCTCCGCG TAGTGGGACT CCAGCTGTGC ACCACCCAGT CAGCCCCACG
CCCACCTGTC CAGGCGTGTC CACGGTTCAG CGTCACTTTA CAGATGAGGA AACTNAGTCT TTGGGAAGCT GACAAGGTGC
CTGACACAGG CCAGGGCAGG GNCACCCCTC ATGGGCTGTG CTGCAGCCTC TGCCTCGTGG GTCACGGCAC CCCATCTACG
AGGNGCCCTT CAAGGATGCG CCGTCGAGTN CCCGGGGCCC TTGGCATGTA CCTGGCAGAG AAGGCAGCTC AGGGGT

SEQ ID NO:1047: (Length of Sequence = 261 Nucleotides)

CTTCTCAAA CTCGGGTTC AGCTGGGTCT CAAACTCAGG CTCCAACCTG GTCTCAAACCT CGGGCTCCAC CTGGTCCCA
AACTCGGGCT CCACCTCGGT CCCAAACTCT GTCAACACCT CTTTNTAGGT CTCANTCTCC GACTCCTCCC AGCCAGCGGT
GGTTGGCGGT ATNAGGCCCC AGGGCTCTAT GGTAGTGCTC AGGGTGNGTG GCAGGGGCAG GGGGCAGCGT GGGAGGCACA
GTGTINGGGG CCTAGGGTGG T

SEQ ID NO:1048: (Length of Sequence = 390 Nucleotides)

GAGAACAAAG AGAATGGAGG CCACATACAA TGGAGTAACA GAAGCTTTGC CTGTAGCTCA AGAACCAAGC CGAGAATCCA
CACCTCTGA TTCACAGTTC AGTATTTTTC GCCACTTTAC TCAAATATTT TTATAAATTA TTTTAAATC GGCAAAATAT
TTAAATTTCA TCCATTAAAT TTAAATTTCT AGATGCCCTA GTGGCATCCA GAACACATAT TINGGGGAAA ATATTCTAAT
TTTTTTAAAC AGAAAAAGCT AGGNNCAGAT GATGCATTAA AAAAGTAGAA CACAGAGCTC TTAATTTAGG AATGATCAAA
ATAGGGTGA TTCAACTATT ACCTTCTCTT AGGGATTATG GATCAACCCC TAGCAGCAGN CAAAGTCACA

SEQ ID NO:1049: (Length of Sequence = 335 Nucleotides)

AAACTCACAA GTAAATAAT GCATATTTAA GGGAAATATT ATACAGACTT TTTACACAG AAGTACATAA TANGATTTTT
TAAATCTAT TGCCATTCAT TTATTTTTGC AAAAAACGT ATAAATATGT CACCAGCTTT NCTTAACCTA AAAAACTTAA
ATAAAAGACA CCAGATGAAA ACTACCCCTT GCTGCCATTT TTTTFTAAGT TTTTFTGTAG GGGTTTTTAA TTTTGGNGT
TTTTTNCCTT TTNTGCTTA GAATTGGGT TCTAGGGAAG AAAAGCCCCT GCATTAAAAA CAGNCCATTT AAAAAAAAAA
TTCAAAGTTC TGGAT

SEQ ID NO:1050: (Length of Sequence = 265 Nucleotides)

AAAGGGAGGG AGGGAGGGAT GTGGAAAATA TGCAAGATAA ATTAATNCT TAGTTAAAAA AAAAAAAG TTTACCAAC
TGINTCCAT TACTGAGAAG CCCCCACTT GCCCCACTGT GCATATTCCT AGTATTTTCAT CCATGTCCTG CTCGTCTGTG
CTGCCCTACA AAAAANCCCT CCCGGGGGGG AAAAAAANC AAAAAANCGG TGTAGTGTA ACTGCTGAAG AACTTAAATG
TTCAAGNGCA TCTTTAAAGT CTAGG

SEQ ID NO:1051: (Length of Sequence = 298 Nucleotides)

ATTTCTAAAA TGCTCTCAA TACTAATATT ATACATTCTC CCAATTATCC TCAAAAAACC CATGAGACTG GTGATGTAAT
TNTGTGTTC ATTTACAGC TGTGGCAGTC AGTCTAAAGA CCAAGTGATT TGCTCAAAGT CATGGAACAC TTAAATGGCA
GAGCTAAGGC TTAAACCCAG AATTTAAAAA TTTTTTINAG CTTCTNGTTT TTNCCATTAT ACCAGTTTGG CCCTTCATTT
TATTCATGGG TTAAATTAAA TTATGGTAAC AAAGGGCCCC TGGTCACTTT GGACATTT

SEQ ID NO:1052: (Length of Sequence = 359 Nucleotides)

AAGGCAACG TGGTACATCA TGACACCATG GGAATGACTC ATGCCAGCCA TAAAAAGAAT GAGAATTCTG TCCAGAATTG
GTCTCTCCG GTGGGTCTT GGTCTCGCTG ACTTCAAAAA TGAAAGCCAT GAACCCCTGT GTGAGTGT AACAGTTCCT
TCAAAGATGG TGTGTCCGA GTTNTTCCC TTNCAGAATG TTCCAATGT TATCCCAAGT TTCTTCCCTT CTGGTGGGT

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TGGGGGCAGG GACAGANCAG CAGGAACCTA GCAGGGACAG CAAGGTGCTA AGCAGTNA GTTCTTCAAGG GCAAAGGTTA
GAGCTG

SEQ ID NO:1040: (Length of Sequence = 399 Nucleotides)

GAGGTCAAGA AGAGCTTAAG AAAATATAGG AGATACTACA GCATGTTTGG TTTCATGACCG GAATGATTTA GTAAGAAGGA
AAAGCCAATA ATGTAAGAAA GCGGATTGCA GGAGCAAAGA CTTTAAGGAA TAAAAAGGNC AAAATGTGTT GTTCTCAGG
GAAGTAATGA CAGGGGCTGA GCAGGAGCCA GGAAACCCAG CTTTATAGCTT CAGTCTGCC TGACATTTAT TGGTCATGTG
GCTCTGGGIG TATTCTCACT TCTCTCCCT AAATAGCAAG AAGGAAAAGC CTCTGGAGC CTCGTGCTC TGCTTCTTTC
TGTAACAATGG TTAATGTTCT GNTCCGCTTA GCTGGTTAAT TATAGAATCA CCTTNGCTGG GGTCTTTTGG GGAAGTGGC

SEQ ID NO:1041: (Length of Sequence = 324 Nucleotides)

CCATAACAG TCCTCACTG ACAAATGTTG TTACGCAGCA CATTTTATGC AGTGTGTGAC CATAACGAT ACACAGAGGA
AATTCAGGC TTCTAGGAAA CCTCTAAGG CCTCATCTCC CTAGGGCAC CTGATGAGCC ATTCTCACC CCTGCACTGC
ACCAGGNTC CAACACCACC ACCAAGGCTA ACOGCTGTG ACTCTGGGC CTGGGTCTG AGTACCTGGC TCCCAAGCAC
ACCAGCATCT GAAAACTTGN CATCTTGCC GATNTTNOGG GGAGTATTGG TTGATTGCAG TGACAAATCG GCAGAAGTTC
CGGG

SEQ ID NO:1042: (Length of Sequence = 212 Nucleotides)

ATCTGTTTCT CAGAGATGAC ACTGCCAACA ATCAGAGATT TGCATACAAT ACAGTTATGT ATTGGCTATT CACAATTAC
AGTAGTGTGTT TTCCCTCTGA AAAATATAAG TNCAAAAGCT AAGTAAACAA TNGGTACTG CCATTGGGN TTTTTTACAT
GCTCTTAGCT TAAAGAACTG GTCCTTAGCA AATATTCAAC AGNTCAACCT GA

SEQ ID NO:1043: (Length of Sequence = 329 Nucleotides)

ACTTGGAGAA AGAAAAATTA GAGAATTCCA GATCCTTAGA ATGCAGATCA GATCCAGAAT CTCCTATCAA AAAACAAGT
TTATCTCTTA CTCTAAACT TGGATACTCA TATAGTAGAG ATCTAGACCT TGCTAAGAAA AAACATGCTT CCTTGAGGCA
GACGGAGCTA TTCCAGATGC TGATAGANCC ACTTTAAATC ATGCAGATCA TTTTATCAA ANTAGTNCAG CAGCAAGATG
AAGAGOGAOG TCGGCAGCTG AGAGAGAGAG CTCGTACAGT AATAGCAGAN GCTCGATCTG GAGTNAAGAT NTCAGAACTT
CCCAGCTAT

SEQ ID NO:1044: (Length of Sequence = 285 Nucleotides)

GTTGAAGCTG TTTTNAATTG ACACCCCTCT GTTTTAAAC ATAGGGACTG ACAGGGAGAC CCAGGGCTGC AATCTGGGTG
GTGCTACATT TGTAGACAAG GACAACTTGC TGTATTTTAA CCCAGAAACA TTAGAAAGTT TGTCTTGAA CTCTGGCTC
AGATTTAGAT GCATCTTGA AGTGTGATA TTTGGCTTAT CTGAAGCTTT GGGATTATCA TTINCTAGTT ATGAAGGGAA
TGAAAGTGT CATAACAATT TTGCAGGTG AAGGTAAAGT TGTG

SEQ ID NO:1045: (Length of Sequence = 317 Nucleotides)

TCGGTTACTG TAGTATTGTA GTATAGTTTG AAGTCAGCTA GTGTATGCC TCCAGCTTTG TNCCTTTTGC TCAGGATTGT
CTTGGCTATA CAAGGTCTTC TTTGATCCCA TATGAAATTT AAAGTAGTTT TNCCTAATTC TGTGAAGAAT GTCAATGGTA
GTTTCATGGG TATAGTATTG AATCTATAAA TNAATTTGGG CAGTACGGNC ATTTTCATGA TATTGATTCT NCCTATCCAT
GATGATGGAA TCTTTTCCA TTTGTTGGG NCTTCTTTA TTTCTTGAG CAGTGGGTTT GTAGTCTTG GACAAGA

SEQ ID NO:1046: (Length of Sequence = 316 Nucleotides)

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AGTGGCTTAC AAAACACAAA TTTATTATCT TACCATTCTG TGAGTCAAAA TTCCAAAATA GGTGTCACTA GGCTAAAATG
 AAGGACTGCA TTININCCIG CAGGCTCCAG GAGAGATCTA TGTCTTACTC TTINCGGCTT CTAAAGGCTG CCCACATTCC
 TCGACTAGTG GCGTCCCTCC TTCATCTCTA AACCCAGCAA CAACAGGTTG AGTCTCATG TCACATCTTT NITACCTTTC
 TGTCTCTCA TCTCGCTGAC TGCTGCTGGG AAAAATTCTC CACTTTTAAG GGCTATCATG ATTAGACTAT GCCCACTAGA
 TAATACAAGA TCTCAGATCC CTTAACTTCC ATCAGATCTG CAAAAGTCGC TT

SEQ ID NO:1034: (Length of Sequence = 320 Nucleotides)

CGCGCCGCGA CGGACGCCCT CAACCGGCAA ATCCGCGAGG AGGTGGCGAG TGCACTGAGC AGCTCTTACA GGAATGANTT
 CAGGGCATGG ACGGACATCA AGCCTGTNAA ACCAATAAAG GCCAAGCCCC AGTACAAGCC CCCAGATGAT AAGATGGTTC
 ATGAGACCAG CTACAGTGCT CAGTTCAAAG GAGAGGCCAG CAAGCCAACA ACAGCTGACA ATAAGGTCAT TGATCGCAGA
 AGAWTACGCA GCCTCTACAG CGAACCCTTC AAGGAACCCC CAAAGGTGGA AAAACCTAGT KTTCAAGATT TCAAACCAAA

SEQ ID NO:1035: (Length of Sequence = 375 Nucleotides)

TTTTTTTTTT TCAGTGGAAA ATAACCTTNA TTGAGACCCC ACCAAGTGA AAANCTGTNC CTGGCAITTA GCTCCTTCIN
 CCTTGAAT TCGGTCTTTC TTCAGTGGTC CCATGAATGC TTTCTNCTCC TCCATGGTCT GGAAGCGGCC ATGGCCAAAC
 TTGGAGGTGG TGTCAATGAA CTTAAGGTCA ATCTTCTCCA GAGCCCGCCG CTTCGTCTGC ACCAGCAAGG ACTTGGGAG
 GGTGAGCACC CGCTTCTTGG TTCCACCAC ACAGCCTTTC AGCATGACAA AGTCATTGGT CACTTCACCA TAGTGGACAA
 AGCCACCCAG AGGGTTGATG CTCTGTIMAG ATAGGTCATA GTCAGTGGAG GCATT

SEQ ID NO:1036: (Length of Sequence = 304 Nucleotides)

CTCTATGTCT TCTTCTTTTT GCTTCTCTC AAGTAGAG TGACTTTTTT GAAGGTTAGC TTCTTCTAAG AGTTGCATGC
 TATTNCTGGC TCTTACAATA GCCTCATATC TCTNATTINC TAATTCATTG CACTTTGCTT GTAGCTCTCT GGTCTGTTTT
 TCCAGATGIG TATTINCGN TCTNAATGG TTGGCTTCTT GGATTGTAC ACATAATCTT ATTTCTAATT GTTTTATACT
 AGACTGTAAC TGCTGTAAAC GGCTATCTGA TGCTTCTCT CTTCATGGG CAGACACCAC ATCC

SEQ ID NO:1037: (Length of Sequence = 341 Nucleotides)

CTATGAGGAC CAGCAATTAG ATTTTATAGC AGTACTTCCC ATTAAAGTGA ATAACCAAAA TCACTTTAAG GTCAAGATCT
 TAGTCAATAC ATTATGTAAA ANCATATACA ACAGACAATA CACCAGAAAC TAAATCTTTT GCAACCTTTT AAACCTATGA
 TGAAAAACAT TAATGTACAG TCTAAAATGT ATTAAGCAGT TTTTACAAAA AAAATGTATA GAATACAGGA GCCAAAACAT
 TTANCAATTA CCTAACCTG CTGACACAGA NTACTATTAA TAAATAATAC TGATCANNGN AAAGTAATCA ATTTGAAAGT
 GGTGGGGGTA GAAGGACAAC A

SEQ ID NO:1038: (Length of Sequence = 281 Nucleotides)

GGAGGCTGAG GTGAGAGNT CCTTGGGCC CAGGAAGTCA AGGTTGCAGC AAACAGTGAT TGCACCACTA CACTCCAGCC
 TGGGCAACAC AGCAAGATCC TGTCTCAAAA AAAAAAAAAA ATATCAGTAT TGTTTTATTA ATTGTAACAA ACACACTAAA
 TAAATGTAAAG ATGCCAACAC TAGGGGAAAT AGGATNTGGN GTAAATGGGA ACTCTCTGNA TCATTTTTGC AACTTTCTG
 TACATCTTAA ACTATTTTAA ATGNTTCTAC AAAAGTTAAC A

SEQ ID NO:1039: (Length of Sequence = 246 Nucleotides)

CCAATGATGG CAAACATGAG GATGGCAAAG AAGAGAAGCA GCCCAATCTG CAGGAGTGA ACCATGGCCT TCATGATGGA
 CTTGAGCACC ACCTGCAAAC CTGGGGCCAG AACAGGCGAG GTCAGGAAGC AACGTGGGCA GGGTAGGGCA AGGAATTING

275

SEQ ID NO:1028: (Length of Sequence = 401 Nucleotides)

GATCATCATG CAGCTCAACT TTCTGTTGGA TTCCATGCTA AGCAAGCTAA CCTTATCCTG CATTGTTAGC ACTAGGCACC
CAGCTGCCAC CTCTCCATCC TGCTGCCCTT AGGCCACATG GGAGCAGTCC ATGCATGACA GCCTCTATCC TACAAGGCCT
ATGAGTATGG ATTGGGGGGG CCAAAAGGAA AAAGCTCCAT GTGCCCTCTT GTCTGCGTGG GTCAGAAGAG TTGTGCACGC
AGATTAGCAG GCCAAGGTCT GAGCCACAGC AGCATTTTTA TTTAGATTT TGATAACTGT TTATATGTGT TGAAACCAAA
NTGNCATCTT TTTAAAGCTT ATCCATAAAA AAAAATAGAT GTCTTTTATA GTGGGAAAAC ACATGGGGGA AAAAATCATC
TATTTTGATG CAGCATTGA TAATGNTTAA ACACCTCACA CCTCACTCTT

450

GAAAAATGCC AATTGGATGC CCTTAGGTGG AGGTGAGAAA ATGGCATCCT TGCCCTCTTC TCAATATGAA ACATTAACTA
GTGACAAAT TTATCCTTGT AGAAATGAAA ATCTATTTAA TCAGGGACCA GAAATGGCTG AGGAGATAAA TGCATCATTA
CAAAATTCTG CTTTGAATC CTGGACATTA CAAGGGGGTA AATGCAGCAT GACTTTTGT TAACCACATT CCAAAATGTG
GAACATTTCT TTTAGAAATG AAAATATTTT AAGGCTGATG TATTTTAAAGN CTACACATTA TCAGGGNCAT ACATTGAGAG
TTGCTTAAT TAAAGTGTG TGGGCATCA AATTATGTTA GTAGGTACT ATTCTTAAC AACTCAAGN TGCTTTAATG
G

SEQ ID NO:1030: (Length of Sequence = 340 Nucleotides)

TTCCCGCTTG ATTCCAAGAA CCTCTTGAT TTTAATTTTIN ATTTTAAAG AGGGAGACGA TGGACTGAGC TGATCCGCAC
CATGGAGTCT CGGGTCTTAC TGAGAACAAT CTGTTTGANC TTCGGTCTOG GAGCAGTTG GGGGCTTGGT GTGGACCCCTT
CCCTACAGAT TGACGTCITA ACAGAGTTAG AACTTGGGGA GTCCACGACC GGAGTGCCTC AGGTCCCGGG GCTGCATAAT
GGGACGAAAG CCTTTNTCTT TCAAGATACT CCCAGAAGCA TAAAAGCATC CACTGCTACA GCTGAACAGT TTTTTCAGAA
GCTTGAGAAA TAAAACATGA

SEQ ID NO:1031: (Length of Sequence = 452 Nucleotides)

CCAGGGGAAG GNTCCCAAGG GACGGGCTGG CAGCOGGACA CATGGACAAA CTGATGGACC CAGGACTGAT CAGACAAAGC
TCTCATTAGC AGAATGTGGG CACCTGCACC CAGGGCCCAT ACCACGTCCC TGTGAGCAAA AAAGCTTAAA GTTCTCCCTC
CAGGCCCAGG GCCAAGAGCG CCTCACAAG GGCTGCTGCC TTGAAC TTGG CCTGGGGAAA TNAGACCCCTG AGCGGACCAC
AGCCCTTGAG CCCTGGGAGG AGCAGCCCAT CCAGNAGCAG CACAGCTNCC GAAACTTGAG GAAGAAGACT TCCACCCATA
GCACAAGAAC TGCAAACTACT GTCTINGNCA GAGCCACCAG AGGCCTTAGG CTTCTTAGGA CACCGATATC CCCCAATCAT
GGGFTINGGA GGGAGTGGCT TTTTLAGGCA AGGGACTTTG TTAGAGAGGT TT

SEQ ID NO:1032: (Length of Sequence = 411 Nucleotides)

GAATCTACAG AAACATAAAT TATACTGAGT TGTGCTGTAC TGGTTTGIGA GAACATCAGT GTATTAAAGGA GAATGGTAGT
TTAATTGGA TATTAAAGA AAGTAATTG AATGGTCTA GTACTAGGCG CATTATTAACT TAGTAACATA GATTAGTGAC
TTCAACTGGG TGTCTTATT ATCTGATTG TCTGAAGTGA AAAGTGTAA GGTGCTCTTT TAAAATGTAT TTGGAAACAC
CATAGTTAGG GTAAATNCAA TGTCACAAT CACTCTTGCA TATTATTINC TTAGCCAAAT TTATGAATTC TAAGTTAGGC
CAAATTGAAG GTTGGAGTT TTACATTGTG GGNAGTCTA AATTCATCGG TTTGGCAAGC ACCAAGNCA TGGGGAAAGA
ATCTGGTATT T

SEQ ID NO:1033: (Length of Sequence = 372 Nucleotides)

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AGCAACAGAA GAAAGGGCCA CATATATGCA AATGCCTGGT CACTATATCT GGCCCTGAAG AAGGAAGGAG TTTGCAGGGC
 TCAGGAGACT GGAAATTTTT NCCAGGAGCT AGGAACGAGG GGTGAGGAGA CGTTGGTCAA AGGGTACAAA GTCCCACTTA
 TGCAGGATGA ATAAGTTCTG AAGACCTAAC ATACAGCCCA GTGACCATAG TGAATAACAC TGAATGANCA GTATACTCGA
 AATTGTCTAA CAGAAGAGAT CTTAAGTGTT CTCATAACAC ACAAACATA GCAACTGTAT GAGGTGATGG GTATATTAAAT
 TAGCCTGACT GTGGTTATAC ATTTTATCAA AATGTCACAC TGTGGCTGAG TNCAGAGGCT CATACCTATA ATCCCCANCA
 TTTTGGGGA GCT

SEQ ID NO:1023: (Length of Sequence = 379 Nucleotides)

TCAAGTCTCA AAACTTTAAA AGACAGTAGA TATTGTGGT TTTCTAGCTA AATGAGGGCC AAGATTGGNC TTTTCAACT
 AAATGAATC ATGTAGTATA TCTGATTCA TAGCTTTCTG GGGGAAAAGG GAGGATTTGA ATTAGCAGCA GTGCAGGTCA
 GGAGCAGTAA AGAAGACAGT AGGAGGAGTC CAACTACAGA TGTGAATGAN CAGCCTCAGA GGAACACATG AGAAGGTGAC
 CTCTGTTTA TCAGGAAGGC GGGGCTTTCT CTCTAAGATA CAAACCAAT AGGAATCGTC AAATAGTTCA AATTATCCGG
 GGGAAAAGC CTGAGCAATG ATCCCTCTGG AAAACAAAGC AGTTCTCAGG CAGCACCTT

SEQ ID NO:1024: (Length of Sequence = 320 Nucleotides)

AGTCTACAGG AACAAAGAAA TCTAAGATGG CTGCTCAGCC TTGAAATGTA CATGTTTTCG AGCAAAGTTG TTGAAGAACC
 TTCCGTGGC ACAGATTGTC CTTTTTCACA AGCATACAGA AGCCTCCTTC CGCCCAGGNC TCTTCGGTTG CATCCTTGCA
 AATGGCTCCC ATTTGACACA TTCCTAAGTC TAAGAGATAC CCACTAGGGC AGCTTGTACA GTTCTTGAAT CCTGGGCCAT
 TGCACGTCAA ACAACTGATA TCACATTTTT TTGCAGGATT TGTATCCATT CTCTGAAGAG TGGTCAAAGT AATAGCTGAT

SEQ ID NO:1025: (Length of Sequence = 368 Nucleotides)

TATTTAATCA TTCTTTTCTT TGCCGAAGA CTAAAACTA AGAAGATTAT TCGAATGGTG AATTAACTTG TTGAAGAGAC
 TATTCCAAAG GGATAGAATG AGACTAATTY CTGACTATGT TTTGCTAGTG ATGGGTGGAT GGGAAACAAAC ATTACAAGAA
 ATAGCATAAT GAATGTAGAA AATATTTTCTG TTGGGAGATG TGCATGANIT AGTTTCTTAG GTTTGCCACA ACAAGCATC
 CCAAAGTGGT GGCTTAAAAA ACAGAAATTT GTTTCATGGT TCTTGAGCCT AGAAGGTCAA AATCAAGGTG TTGGCAGGAC
 CATGCTCTCT CTGAAACTCT AAGGGAGAAG CGTTCTTTGT TTCINCT

SEQ ID NO:1026: (Length of Sequence = 379 Nucleotides)

GGTGCAGGTG CATAAGGAA GGACCATGTG GGCTCAGAGC AAGGGGGCGG CCATCTCCTA GCCAAGGAGG GAGGGCTCCA
 GGGACCCCAA TCTGCTGGC ACCTAGGCTT TGANCTTCCA GCCTCCAGAC TGGGAGAAAA TAACGTCTCA TTGTTAAAGC
 CCCAGCAAA TGANTACAGA ACCTAGGAAG GGGCAATGAA TGANTGATAG GTGGAAGGGC TAAGAAGAAA AGAGGAGGGA
 GAGGAAAGAG ACGTGCTCAG ATCTGTCTCT NCTGGACATC CGATCCCAGG CTGTCTCTTC AGTGGGNCCA AGTCCAACCTA
 CGATCAGCT CAGAAATAAT CCCINAGGCA TCGAAGCTTT CACAAAGGAG GNCACAAA

SEQ ID NO:1027: (Length of Sequence = 411 Nucleotides)

GCCCTTGGCA CTTAGAAGCA GCCAGGAGG AAGTACTGAC CATTTAAAAG TGGCAGATCT CCGGGCCCCA TTTCTGCAGC
 CTTCACTCTG CAACTCCAGG GAGGGTATTT TTNAITTTGTG GGTTCAAAA ATCTGTATAT ACAGTCTATG TGTTTAGAAT
 TTGTGTTGTA AGTAAACTAC AGCTTTGAGT TGGAAAGAAG TCACGGGTG TAAACCAATT TGGATTTTTT TAAACAAAA
 GTATTAATAA TCTGGAAGAC AGINTTGCC AGGTCAGGAG TGTTTTCTTG GTGGTTCCAG CCCCATCAA TTGAAGTTT
 TCTGGGCTCA GTCAGACACA GACATTCATC TGTGTCTGAC CAAATCAGG GCTTTCCAC CTGTGGGGA GGGCACAGTT
 AGGATGTTTT T

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GAATAAACTG GTTGGGAACC AGAAAAGTAC AAAAAAGAAC AGCTAGAGGT ACATAGACAC AGGACAATTA ATCAATTTGG
GAAAAAAGAA AGNACTTACT TTCTCCATTG CTGCCTGAAT TGTTTCCCAA TCTGCCTTGA AATGCCACTT TTGGCCAATA
TTTTTNCAAA AATTGACCA AAAAGAAAA AGCACTINAAT TTCCCTTTTT ATACAAAAAT GNTAAGTAG GCAAGT

SEQ ID NO:1017: (Length of Sequence = 259 Nucleotides)

GCTTCCCTAG ATTTTCCCT AATTTGGAC CTATGTGGAC AAAAAAATA ATCTAGTCCA AGCTTTCCT ACCTTCTTTT
TTTATTOGCC TTCTGCTTCT GNGTCCACA TGGGAACCTG AAGTGGTTTA TAAGAATGCC ATGCTGTGCA AATAGTAAAA
ATGAATTTNC TGATTTTAA AAAAGCCCTC AGGAACGGCA TATGTATANG GTATGTATAT GAAAAANGT GTTINAGGAAT
GCAGGAGGGA AACTAGGCG

SEQ ID NO:1018: (Length of Sequence = 354 Nucleotides)

CTGGAGGAGG AGAAGAAGCA TCTGGAGTTT ATGAATCAGC TAAAAAATA TGATGACGAC ATTTCCCAT CCGAGGACAA
AGACACTGAT TCTACCAAAG AGCCTCTGGA TGACCTTTTC CCCAATGATG AAGACGACCC AGGGCAAGGA ATCCAGCAGC
AGCACAGCAG TGCAGCOGCG GCTNCCAGC AGGGCGGCTA CGAGATCCCC GCGCGGCTGC GGACGCTCCA CAACCTGGTG
ATCCAGTACG NCTGCGAGG GCGCTACGAG GTAGCTGTGC CCTNINCAA GCAGGCCCTG GAGGACCTGG AGAAGACTTC
AGGACACGAC CCACCGGAC GTGGCCACCA TGCT

SEQ ID NO:1019: (Length of Sequence = 393 Nucleotides)

GATGACCGAT TTGGCCATGG AAGACTTATC TTCATGGCAC AGAGAGNYTG TSCAGAGATG AGTCAGACTC AGGGGCTGAG
TAACAGCAGA GCAGAGAGTG CAGAAGTGA CGCTCAGAAG CGAGTTTATG TGTGTFTTY CCTCTATCTG CTGGCTGTGG
CTGGTACTGC AACCTATCCC AAAGTAACAG CCTAGTCAAT GAGGTATATG CTTGAGATCT GGCAAACTCT CTCTGCACAT
AAAAGTGTA TTCTTAGTTC TCTGAAAGAC CCCACATCT TTGAAGTGTA AACTAAGAGC TACATTTTCC CTTTACTAC
ATCTCCCTTA AAAGGAAAGC ACTACAAGAG CTTAAATA GCAAGCTTCC CTATTCTAAG GGGAAANAGT CTT

SEQ ID NO:1020: (Length of Sequence = 403 Nucleotides)

CTGAGGAAGA GAGGTGAAGT GGCATCTACC CAAACACCT GTGTACTGGT TAATAAGGTC GGTAGTTCCC ATTAATGAGC
TTGATGAAGG ATGGCACCTG ACAGGGCCTT AAATGANCTG ATGGAGTGAA TGTNACCACT GTGAATTAAA TTNCTTTAT
ATATAATAAA TAGCTGTGCT TACACATTTT CAGATTINCT TTGTGAGCTA TGGACATGGA ACAGGGGAC TATGATTCTA
GAACAGCACT CCATGTAGCT GCTGCAGAGG GTAATACAGG AACTACTCCT ATCTATTTC TTTCCAGATT TAATTTCTAC
TTAGTACTAA AATCTGCTCT TTTTITGGGG GTGGGACGGT ATAGGTCATG TTGAAGTTGT TAAATTTTTT NCTGGAAGCC
TGC

SEQ ID NO:1021: (Length of Sequence = 452 Nucleotides)

ATCGCAACCT GGCAGGGGTG TGGGGTTTGC TGGGGGCCCT TGTTGGGCCA TGATCTGAGG AGGGTATGTG GGGGGCGGGA
GCTCAGCACA TTCCATGGCC TAGAGGGGCC ACACAGAGGC CCCAGTGGGA CCCATGGCGT GGAGGCAGGT ATGGGGAGTT
KTGGGGAGAT CCCAGGGTGG TCTGGGGCCT GGAACCGGCC ATTKGGAGGC CCCAGCAGTT TCAKTGCCCA GGGCCTCCCT
GCAGAGCCAT GCATGGCAGA AGAAGTGTGT AGCATEAGCT GGTACAGCC CATGCCCATC AAGAAAGGCA GTGTGGTCAT
GCGTKTGGAC ATCAGCAGCA ATGGCCTGGG GACCTTCATT CCAGATAAAA GGTTCAGAT GATATCAACG GCTTCCTGAA
GAGAGACCGG GGCAATAACA TCCATTCAAT TGGGAGAGGA GGTGAGGGAT NT

SEQ ID NO:1022: (Length of Sequence = 413 Nucleotides)

272

GATAGCAGCA ACATACGTTT GTTTATTCAT TTGCTTACTT ACAACAAACG TTTATTCTAT ATTTATAATG CAACAAGCAT
TAACCTAGGT GCTAAGGAGA GAAAAATGAG TAAGACACAG TTTCTTTCCT CAAGGAAATC ACAGTCTGTT GGCAGAGATA
AGTAGTAATG GTGCCTAATA TAGGTAACAC TTGCTACCTG CTCCAAGAAC AAAGTTAAGC AAGTGATTAA GTTAAGCAAT
GCTTAGAGGT AGAGGATGTA AGANTGGCCT TAAAAAATGT GTCTTCTGAG ATGAG

SEQ ID NO:1010: (Length of Sequence = 356 Nucleotides)

GTATTTCCTC ATTTGTGCAA ATNAAATAGA AAAGGTAAAT NAGAAACTCA AGAGGTTTGT TACCTACTGT CAATGGAGTG
GGGAAATGG GTGGAAAGAA GAAGGCAATA AGAAAGAGT AACAGGAAAC GACAGTNGAC ACTTCTGAGT ATACCTTGTG
GAATCTCTTT CACTCTTAGA ATCATAGTAA TAGANGANGA AAAAGAAGT CCCCAACTG AAAAGGATAG ACCACTGGAA
CAACTTCAAG TGGTCTAATG TAGAAGCAA TGGAGTCCCT CAAGGAAAGA AGAGAGGTTT TGAAAAGAAA AAAACATTTG
AAGAGTTAAC AGCGAAACAC TTTCCAACT TAAAGG

SEQ ID NO:1011: (Length of Sequence = 315 Nucleotides)

AGAGAGACAC AACTGTAAATA GAGACACAGA GGAGTGGCAC ACAGAGACCA CCTCCAGCT GGAGACAGTC AGGAAGGACT
GAGGGAGAGG GGACAGCCAG GGCTCCACAC CCAGGCAAGA ATGGGGGAGG GCCTGTGGAA CAGAGAAGTC ATCAACACAC
ACAGTTCAAA GTCTACCTTA GGCTAGGAGG GGGAGCAGGA AGAAGGGGCA GGGACGCAGG GGCCCGGCCT GCNAGCTCCC
TGTGGGCTC TNCTGCCCC TGCTGGCTCC CNCTGGGGTG CTCAGGCAGG AAGAGAGGAG GCTGCTGTTT TTAGG

SEQ ID NO:1012: (Length of Sequence = 272 Nucleotides)

CCCAACTCTA TAGCCCTAGT CAACCACTAA TCTATACCCT GINTCTATA GATTGCTTA GTCTAGAAAT TTTGTATAAA
TGAAATGCAT GCACGTGAAC TTTTGTATC TGGCTTGCTT TTCCATTIAG CATAAAGTTT TAAAGGTCCN CATATGTTGC
TGCAATGTG CATTTCTTTT TGTGNACTGC NATATTACAT TGTATGGGAT ATACCATTTT GCCATATTTN GTTAAATCCA
TTCATCCAGT TGGTGGGACA GCAGTTATT TC

SEQ ID NO:1013: (Length of Sequence = 252 Nucleotides)

TTTGTAGTG TTTTCTACAC TAACTCAAG TTCATTGAGC ATGTCATTTT AACACATGT GACGTGTCAA CTTCAAAAAT
TAAACAAACC AGCNAAACAC AACACTGNC ACTACAAAGG AACTGTGTTT ATTCTCAACC TTCTATGATA GCTAAACTTC
TCTGNAATTT NGTTCCCCCA CACATCCAC ATCTGGGCTC AATTCCAGC TTCTGTINIT CTGTTTTATT TCATCCAAAA
TGTTATTTTA AT

SEQ ID NO:1014: (Length of Sequence = 210 Nucleotides)

GGGATACACT GACAGTAATG TGAAGGCCCA CACTGCGAGA TTTGAGGCC AGCAGGTCTT GGNCAAGTGC CATTCACCC
GGAACTTTAA ACCCAAGCGG TGGGAAGGA AAGCCAAAAC TCCAAGCTGG CACTTTTTTG GGGTCTGGG CCATGACACT
TCTTAGGCCT TCTGCTGCTG AACTTTTACA GGGACAAAAG GTACCCACG

SEQ ID NO:1015: (Length of Sequence = 222 Nucleotides)

GGNAAGAAAG GTTCTCAGA GGACAGCCTT ATTAATTTCT CAGAGGATGA ATTTGNACAA TGGCAGCAGC TTGCAGTCAC
AACTTCTTAA GGTCCTCAG AGGCTGATTG TTTCTAGNAA CACAGAGTAA TGAATATTCT CTGAAGAGCA ATGAACAGG
TTTGAATTT TTTGTATCT GNACTTAGNA ACACATCAGT CCCATCAAC CCATGGACTT CT

SEQ ID NO:1016: (Length of Sequence = 236 Nucleotides)

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CCGTGTTCCC AATGCTACC CTCCTCTTC TCCTTCTC TTTCTTTTC CTAGAGAAAT CCTGCTTCC TTTCCTTCC
CAGAGGCAAC TGGCATTATA AT

SEQ ID NO:1003: (Length of Sequence = 267 Nucleotides)

GGAAAGAGGA GCAGGTCTGG AGGTTTGTTG AACCCAGTCC CCTGCAGAAT CTGTAAAACC TAATAAATCA TGGTTGTGGC
CATTCTCAGC GTGGTGATTG TAATTAGACG ACCCCCGGGA AGCCACAGCA CTCGGGGCCT GGAGTTCCTC CCCCTGCCCTG
ACCTAGAAGC AGAACCGTTT TCAGCCTCTC GCCCTGTGG CTTTAAGGCT TTGTCTTAAT TTAAGGAAAA AGATCCTCCC
GGGTTTATT TCTCTCTTC TTGAGTG

SEQ ID NO:1004: (Length of Sequence = 277 Nucleotides)

GGCTCCTAAA CACTTTCCTC CTGAGATGTT AAGCAAAGTA ATCATCCTGT CACTAGATAG AAGCGATGAA GATAAAGAAA
AAGCAAGTNC TTTGATCAGT TTACTCAAAC AGGAAGGGAT AGCCACAAGT GACAACTTCA TGCAGGCTTT CCTGAATGTN
TTGGACCACT GTCCCAAAC GGAGGTGAC ATCCCTTTGG TGAAATCCTA TTTCGACAG TTTGCAGCTC GTGCCATCAT
TTCAGAGCTN GGTGAGCATT TCAGAACTAG CTCAACC

SEQ ID NO:1005: (Length of Sequence = 271 Nucleotides)

GTAGGTCAT TCACACATGG TGGAGACAGG AATCTACAGA CTAGGGATCA GCCCAAGGC TATGATCTTT GTNCTGCGCC
GCTCTACCCC TGAGCAGACG GGCCAGAGGT CCAGAGAGGG CTGTCTGGC AGAGTTCATA CTTTGATAAC TGAACCCTAG
AGTAAGCCTG CCTGGGAAA TNCCAGCTCA AGGGACTGAC AGGCATAATG CTCCTTGGGA GAGAAATGCC ACATCTGCAG
CGACACGAT CCTTAACACT GTCCAGGAC T

SEQ ID NO:1006: (Length of Sequence = 336 Nucleotides)

TATTTTNCAG ATATGGATAA AAATTGCTTA GGAGAGTAAA GAGAGACAAA GTTGAAAGCA GGTTTATAGT AGGTGTGTT
TTAGTGTTGA TCCCTTTTGG CTCGAATAAT CAAAGTGATA AATATTGAAA ATTGATTCAT GCAGCATTAC TTAATCCATT
CTAATTTTNA TATATGTCAA AAGTGCCATC TCCCAAACCTG TGCTATCCCC TTCAGGAGAA GAGACTCTGC TGAAGTTTAT
AAGGTTGACA TATTGCCAGC TTCAATAATG TAAAGATGAA GTGTATACTG GAATCTTAA TGCAAATAAC AACTCTTTTG
GGAAGTAACC CCGTTT

SEQ ID NO:1007: (Length of Sequence = 355 Nucleotides)

GGCAAGAAGG CGTCGGCGGC GCANTGCGGA TCCAGAAGGA CATAAACGGC AGCTTGTTCC TCCAGGCTGG TGGGCTTNGT
GCCCTCGGCC TTGGGATGCT TATCAGATC CTTTGGGACC AGAACACTGG ATATCAGTNC AGCTCTGGG CCAGCTTCAG
AGGCTGTAG AGCATCATG CTGCTGTGGC TGATGCTCC TTCTCTCAGT AAATCACAAA AGTCGTGTG GCCATCCAGG
TTACOGAGTG ACTTAATTT CAGAAAATTT AATATTGAGG TCATTATTGT ATGCATTTTC ACTGTGCCA TTTTGTATC
CTGTAGGTA GGTCTATGAA GTACCACTGG GGTCA

SEQ ID NO:1008: (Length of Sequence = 269 Nucleotides)

ATATTTAAAG AGAGCTTTGG TCAGTAAAAG TATAAANCT GAGCTTTGGT AAGGGTACAG TTTATAAGGC CTAGAGAACA
TCAAAACATT CATTTATAT TGAATGTATA AATACCACA TGTGAGAGCA CATGTTGATT CAGTTTGAAT ATGTCTGCCCT
TGIGGNTCTT TAAAACCTT CCAGCCCTGG TATTTTCCC AAGCTTCTT TATAATTACA CCAGGGAAAG AGTTACCTGG
NATTAATCAA AACCAGACAG TGGACAATG

SEQ ID NO:1009: (Length of Sequence = 295 Nucleotides)

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SEQ ID NO:996: (Length of Sequence = 307 Nucleotides)

GTGCGCCAAC TGCAAGAAGG AGGCCATCTT TTA CTGCTGT TGGAAACCA GCTACTGTA CTACCCCTGC CAGCAAGCCC
 ACTGGCCTGA GCACATGAAG TCCTGCACCC AGTCAGCTAC TGCTCTCAG CAGGAAGCGG ATGCTGAGGT GAACACAGAA
 AACTAAATA AGTCCTCCCA GGGGAGCTCC TCGAGCACAC AATCAGCACC TTCAGAAACG GCCAGCGCCT CCAAAGAGAA
 GGAGACGTCA GCTGAGAAAA GCAAGGAGAG TGGCTCGACC CTTGACCTTT CTGGCTCCAG AGAGACG

SEQ ID NO:997: (Length of Sequence = 402 Nucleotides)

TCTGCACCTA ATACTGAGGG TGTGAAATCT TCCTCAGTAA TGCCAGCCC TAGTACCACA TTAGCGCGGC AAGGCAGTCT
 GGAGTCACCG TGTCCGGTA CGNGCAGCAT GGGCAGTGCT GGTGGGCTAA GCGGCANAGC AGCCCTCTCT TCAATAAACC
 CTCAGACTTA ACTACAGATG TTATAAGCTT AAGTCACTCG TTGGCCTCCA GCCCAGCATC GGTTCAGTCT TTCACATCAG
 GTGGTCTCGT GTGGGCTGCC AATATGAGCA GTTCCTCTGC AGGCAGCAAG GATACTCCGA GCTACCAGTC CATGACTAGC
 CTCACACGA GCTTCTGAGT CCATTGACCT CCCCCTCAGC CATCATGGCT CCTTTGINTT GGACTGACCA CAGGCACTCA
 CG

SEQ ID NO:998: (Length of Sequence = 304 Nucleotides)

GCAGCTGT GATTGTAAG ACTCACAACC ATGTGGAGAG GCCGAATCAC GCAGGAGAGC CAGCATTGG AGTACCCTGG
 CTCCAGCCC CTCCCCACC CCGTNTGAG CCAGAGAGCT ACAAGCAGGA ATCCAGTGC AGCTGCAAT NATGGCCATC
 GAGGAAGTCT GTGGAGAAGA GGCTGGGGC TGTGGTGCTG AGGGGGGCTA GGCTCAGCAC GGGACCACCT GACGACAGCT
 CCCAGCCAGT CCATGCTGTC CAGGTGGCCA TCAAGCCAGG TTCCAGGGCC CATGGGTGCT TGCT

SEQ ID NO:999: (Length of Sequence = 321 Nucleotides)

AGAATGGTTT TGGAGCTCGA NATCTTCATG GGTTAGACTT GCTGGTCAGA CCCAGGAGCA CCTGTGGCTC ACACCTTCTG
 TNCCCTCCT GGCTGTGCA GAATGTAAAC AGCAGACTCA TACTCAATGG GCACTACAGG CCTTATCAGA CGTTTTATAC
 AAGCCTGGAT TGCTTAGTAG GGAATAAGG CATTCTCTGA GGGGGCTTTC CACTTAGATT GAGAATTTTA TTGAAAAGA
 ATCTGGTTTA AATGGCATTC TGGTCCGAGG TAGCTGCTCT CCCCAGTGA AGCTGAGCCG AAATATAAGA ATAATATATT
 T

SEQ ID NO:1000: (Length of Sequence = 253 Nucleotides)

CCCTAGAGGA TTGCGCTCT TINATCTGCC AGTGACCTGA ACCACGAGA TTTTCAAGC AGGAGGGCCG ATTGGGCAAC
 CACAGCTCCC GTGCTCTCTC TTGTCAGTGC GCGGCTTTC CTCGAGAAG GACTTTGAGG ACTACATTAG GTACGACAAC
 TGCTCGTCCA GCGTCTGGC CGCGTGGTC TTCAGCACC CCTTCAACCA CAGCAAGGAG CCCCTGCCGN TGGCGGTGAG
 ACGTGGGCC GGG

SEQ ID NO:1001: (Length of Sequence = 164 Nucleotides)

AAACAGAGTA CTGGATGTC ACTGTTGGAA AGTGCTCACA ATTTCTCATC TAAGCGAAG TTGCTGTINC TCCTTCCTAC
 CTTAAGATT TCTACTGCC TGAAGGCAGC TGCCAAAACC CCTCTAAGCA AGCAGCACTC TTACCCACCA AAATCTATGA
 CCTC

SEQ ID NO:1002: (Length of Sequence = 262 Nucleotides)

ATATCTTCTT GAGGAAAGT GGTAGAGTTA AAGAGGGCAT AGAGAGCGCA CTCATGCATT TACAACCTCAG AATTTTAAAA
 AAAGTTTACA TTTTGTCAAT TGTACTTCAG ATGAATTINC TTATTAAAAG AAATAAGGCC ACAGAGGTAA ACTTAAGTCT

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AACATGAATG ATACCATTTT GCAGCAGCAT TGTAGATTTG TAGTATTTTA GATTGGTATC ACAGTGCACC TGAAAAGTAA
 GTTTCATTTT ACTTTTTTNA TTGTTGTTGA GACGGAGCTC ACTTTTGTCA CCCAGGCTGG AGTGCCAGTGG TGTGATCTTG
 GCTCATGGCA GCCTCTGCCT CGCTGGGTTT AAGCGATTCT CCTGCCTCAG CCTCCCGAGT AGCTAGGACT ATAGATGCTC
 GCCACCATGC CCAGCTAATT T

SEQ ID NO:991: (Length of Sequence = 351 Nucleotides)

CCTCACTCCC CGCGCTGGCA CCTCAGGTTT ACAAGAAGAA CTAGGAAATA ATGCCGGCCA CGCGACCCCT GGAGAGGGGG
 COGGCTAGAA CAGCGTTCCT AAGAATCCGC GCCACAGCAG GTCCCGGAT GTTGGGGCCT TAGTGTATC GAGCTAGCCC
 CAATCCTCAA CCGATCTTC AACTTCTGGT AGTCTAACA GAAGTCTCGT ATTGAACCAG CCACNTGGC CAGGGAGAAG
 TAATCCTCTG ATAGTTGAGG TTCTTNTCT TCCTCTGGAG CAGATAGTGG TGTCTCCTCC CCACAAAGCT CATGTTCTGC
 TGAAGAAAT GGAGATGGCG CCTGGAAGG C

SEQ ID NO:992: (Length of Sequence = 406 Nucleotides)

CCAGAAAAAA TGGCCACTAC TACCCTTGG CTCAGAAATG CTAGTCTTTA TTTNCTGAAA TGTTTTATAT AGAAAAAATT
 TAATAATAAA TAGACATTCT TATATATTTT CTACCATTT NAGATTGGGT TAAAAAGTAT GNGACTTCC GCGGGGTGC
 GGTGATTCAA GCCTGCAATC CCAGCACTTT GGGAGGCGA GGCAGACAGA TCATGAGGTC GGGATCTGTG GCTAACACAG
 TGAAACCCCG TCTCTATTAA AANTACAAA GGAATTCCTG CAGCCCGGGG GATCCACTAG TTCTAGAGCG GCGCCACCG
 CGGTGGAGCT CCAGCTTTTG TTCCCTTTAA GTGAGGGGT AATTTGAGC TTGGCGTAAA TCATGGTCAT AGCTGTTTCC
 CGTGTG

SEQ ID NO:993: (Length of Sequence = 381 Nucleotides)

ATGGAAGGAC CGTCCGGGA CCCCAACGAG GCANTGCGG AGTTTGCAA GGAAATTGAC ATCTCTGTG TCAAAATTGA
 GCAGGTGATC GGAGCAGGG AGTTTNGGA GGTCTGCAGT GGCCACCTGA AGCTGCCAGG CAAGAGAGAG ATCTTTNTGG
 CCATCAAGAC GCTCAAGTCG GGCTACACGG AGAAGCAGCG CCGGGACTTC CTGAGCGAAG CTCCATCATG GCCAGTTCTG
 ACCATCCCAA CGTCATCCAC CTGGAGGGTG TGTGACCAA GAGCACACCT GTNATGATCA TCACCGAGTT CATGAGAAT
 GGCINCTGG GACTCCCTTT CTCCGGCAA AACGATGGGC AGTTTCACAG TTCATCCAGC T

SEQ ID NO:994: (Length of Sequence = 384 Nucleotides)

GTTCCTCCAG TTGGGAAGGA TAAATCAAA TCCCACTTT CTGGGGTGA TGCCCAAAC CTTCACAACT CAAGTGTCT
 CCAAGTGCAA ATGTCAAAT GGGAGGAGGA AAGGGTTTAA AAATTAGAGA AAATGTATG CACTTACGGA CTAAAAATC
 CGAAAAACAT AGTAAAAAGA CAAAAACA TAGCATTATG CTCTGAAATC ACAACCAAAG CCAAAATAAA AGGGACATTT
 TTCACCTAAA CTACCTAGAG GGATTTTTTG TTAGTTTTT CTTTTTCTT TTTTTTTTCA TTTCCAGTT AAGTCTATG
 TCTTTTGA AATCCAATA CTAACTGC AAGTCTGCAA TCGTCTGTA AGTCAGTGAA ATTA

SEQ ID NO:995: (Length of Sequence = 386 Nucleotides)

ATAACTTTAA CAGAGGATTG GAATAATGAG GGATTGGCAA GGAAGCAGTA AAAGGGAACA CTAAAGTATA GAATAATAGC
 AAACAGAAGG AGCACCTAC CCTAGGGCT GAGAAAGAGC ACAGGGAAGT CTTTTTTTNT TCCTGGACAG AGATCCAGAC
 GAGCTGGAGA AAGAAGTTC TATGGTACTG CATCANTGGA ACTTGCTGGA AATCCACCT CAAGGGCACT AGGAAAACCT
 GTTCAGGGGA GCTGTGGAGG GAAATGGGGT TGGCAGGAAA GCTGCTGGC GCGGGTGCT TCAGACTGCA GTGTATTGCA
 GGAGCTTGGG CACTGGGGAA GCTGTGTGCA CTGAGGATC CTGCTGAGC AGCACATCAG ATCAGG

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AAAAAAAAA GGAATGGCC AGGTGCGGTG GCTCAGGACG GGTCTGGTGG CTCACACCTG TAATCTTTCT TAAAACGTTA
TGAAGTTC

SEQ ID NO:985: (Length of Sequence = 439 Nucleotides)

TGGTATACTT TIGINTTTTT TTCTACTTGT TAGTTGTATT AGTATCAAAT GGCATAATAA AGTTACTTTG TTTGCCATTT
CCCACTCATC TGAAAATCAC AAAAAGCATT TATTTCTAAG ATTTATATCC ACTGACCTTT TCCCCAAAGT TATTTTCCTG
TTACTTGTAT TTCATCTTTG CCCTTATTTT TTTAATATTT GTATTAGAAT TAGCTTGCTC TTGTTTCCTT CACGGCAAAT
GTGTACATT GCCCACTGGG TGGCTTCTGC GGATGCCCCC ACCCACCCTT CGTCTGGAGC AGAGAAGTCC TGTTAGCCTA
GCAGCATAGT GGCTGCTGTC AGTGGAGGA GTGTGCTTC TCTAGCATGG TCTGTGATGT CATCTGGACA TAATTAATTA
GACTAATCCG AATAGAGGAC CAAGACAGCC CTGCCTGCG

SEQ ID NO:986: (Length of Sequence = 286 Nucleotides)

CGGCGACGAA CATGGAGAT TCCAGCTTG GAGCGCAAGT CCTCCTGCGG GAAGAAGTGT CGCGGCTCCA GGAGGAAGTT
CACCTTCTCC GGCAGATC AGATGTTG GCGAAGGACC TGGAGGAGTC GCAGGGCGGC AAGTCTCTCN AGTCTCTCTC
GGCCACCGAG CTCAGGGT CTGGCCCA GAAGGAGCAG GAGCTAGCCA GAGCCAAAGA AGCCTTNCAG GCCATGAAAG
CTGATCGGAA GCGCTTAT GCGAGAAGA CAGACCTGGT GAGCCA

SEQ ID NO:987: (Length of Sequence = 381 Nucleotides)

TCCAAAGGTT TTCATCTG TTGGATAA ACAAAC TG GTACATCTAC ACFATGGAAT TTGGGA GATGAAACAG
AATGINTGAG GGCCAC CATGTAT GGTC TG GTCTGCTCC C T T TCCA CAGGCA G TGTGCT
GGGTGAGGGG CTGGGAG GGCAGGAG CATC AAC AAGGGTGGAA GCGAAGA GACCAG T T CAGGGT
GTNTCACATG GTACAACCA GAGACTTGGC GTGCTAGAA CCAAGAAAC ACTCAGGACA CACGACAT CTGCAGGGAA
CCTGGGGGGT GGTGAGGAAA GTCGTGCACG GGTGTTGGG GGGAGACTTG GAGGCCCTC T

SEQ ID NO:988: (Length of Sequence = 381 Nucleotides)

GAATTAATAC CAATAGAAGG GCAATGCTTT TAGATTAAAA TGAAGGTGAC TTAAACAGCT TAAAGTTAG TTTAAAAGTT
GTAGGTGATT AAAATAATTT GAAGGCGATC TTTTAAAAG AGATTAANCC GAAGTGANIT AAAAGACCTT GAAATCCATG
ACGAGGGGAG AATTGCGTCA TTTAAAGCCT AGTTAACGCA TTTTCTAAAC GCAGACGAAA ATGGAAAGAT TAATTGGGAG
TGGTAGGATG AAACAATTTG GAGAAGATAG AAGTTTGAAG TGGAAAACCTG GAAGACAGAA GTACGGGANG GCCTCCTTCA
TGTTACAAT TTTAATTAAT TTTTPTTATT TTAGNGTAA TTTCTTACCA AACATTACCC A

SEQ ID NO:989: (Length of Sequence = 432 Nucleotides)

GTCITGGGCT CTGCAACCT CTGCCTCCTG GGTTCAGCG ATTCCCTGCT CTTAGTACC CAAGTAGCTA AGAT 3
CATGCGCGCT CTGCTGGC TAATATATAT ATATATTTTT NGTAGTTTTA GTAGAACGG GGTTCACCA CGT 3
GCTGGTCTCG AACTCCAGAC CTCAAATGAT CTGCCCGCCT TGGCTTCCCA AAGTCTGGG ATTACAGGCA TTAGCCACTG
TGCTTGGCCA ACAATATATA TTAAATAAGC ACACATACAA CAAAAGTAGG TGTGGTAAG CTTACAAAAA TGTGACCACT
AGCTTGCTGA AACCTAACTT TTTATTTGTT CATGGAACCT TCTAGACCGT AACTACACTG AATAATGAGA ATCTGCTGTA
ATCTTTTTTA GGTGCTGTAG ATGAGCCATT GG

SEQ ID NO:990: (Length of Sequence = 421 Nucleotides)

GGCAGCCCTA CTTTINCTTC TCATTAGCAG TTTCACTCCA CAGCTGGGGT ATTAAATTG TNAGTCATTG AAATTAATCC
CTGACTGAAT TGGAAAGGAA TTGTATTTGC AGTATTTGGA TTTATTTATT TTNCAGGTAT GGAATCTGG TGATTTTGAA

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TTTAACCATTT TTTTNTTCCC TTAAAAAAA AAAACCCAAA AAACCAAATC CCAATAAATA TGTTATTTTT NTCCATCACA
ATATTGCTTT AGAAAAATAA GAGCGTCAA GCAGCAATTT TTCCT

SEQ ID NO:979: (Length of Sequence = 316 Nucleotides)

GTGCGTNCAC ACTCTCCTCC TGCTCCCAA ACTCCTCATC ATTGAAGCOG AAGTGGTCAA TGAAGGCAGA GGTCA TGCGC
TGCATCTGGA AGTCCATGAA GGCCTGCTGC AGCACAGCCT CTTAGGGAA GTTGAACCTC TTGAGCCGGT CGTCTCATC
GTCACCTGAG GAGTGTAGGT GGTGGGTGTT CACCAGGTCC ACCATGTTCT TCTTGTGGT CTCGCCAGG GGCCCGATA
CGAAGGCTTC CCACTGCTCC TGCTGCTGC TGGGAGCTC CTTAGCAGC TTGCGCAGC TGCTCTGCAA TTGGGG

SEQ ID NO:980: (Length of Sequence = 386 Nucleotides)

AACTGGCTT GCCTTCATCA TCTCTGAGG GNTCAGTAA GATTAGAAAT GGATTATTTA CCTTGTATTA CAAATACACC
TCCTCCCTAC ACCCAAGANT TGAGAGGAAG ATGAGCTGTT CCTGTGTTAA CGCCTGANTC AATCCCATTA TCTGCATTTT
TGTTGTGGT TAGCGCTCCA GCAGCTAAG GCGGGAGCTG GAAATGACAG CCTTGGAGAC GAGGAAGGCT CCAGGGAGGA
CGGAGAGGAA CACCTGCTGA AGAATAAGAC GGGCGGCACC AGCCGGGCTG ATTTTGGGGA ACGGAAGGTA ACAGAGGGTG
ATGCTTCTAA TCGCTTTTAC AAGGCTTGG AAAGACGGGA TNGCCTTAAC CAACTTGGGG TTTCTT

SEQ ID NO:981: (Length of Sequence = 322 Nucleotides)

GTTTATTAAAT ATTTAAACAT ATTAAAATAA TACATGTCNA TAATGAAAT GAAACATTAC AAATAAATAC ACAGGAAAGG
CAGTATTTCC CTTCCAGTTC CACTCTGAA ATAACCAGTT AACAAGATGA TGAACATCTT TCCATGATGT TCTCCAAGAT
TCATATTATT TTTGCAATCA TACAATGGCA TATACAGCTC AGGTGCGGTG GCTCAGCAA GTAAATCCCA GCATTTTGGG
AGGCTGAGGC GGGTGGTTCA CTTGAGATCA AGAGTTGAG GCCAGCCTGA CCAACATGAA GAAACCTGT CTCTTACTAA
AA

SEQ ID NO:982: (Length of Sequence = 305 Nucleotides)

CCCAAGGCTG TAGTTCAACA TCAACAGGGC AGGGAGCTTG GCAGGGCAAG GGCAGAGCTG GAGATCATGC CCAGTNTTCC
AGGTGCCCTC CCTCCCAATC AGCCTGGGGG GCACAGGACA GGGATGGAGA AGGGGCTCTC TCCATGGCTT GGGTAACATG
CCAAAGGAGC GTCATAGGGC AGACTCAGTG GGGGTGGGGG CCTGGCTAAC AAGCAATGGA GAGAAGGGG GCCATCCAGA
GAGGTGGCA GAAGAGAGCC CCTGGGTCAA GAGAAACTT TGGGGAAGAC AAGACACGGG AGAAG

SEQ ID NO:983: (Length of Sequence = 399 Nucleotides)

AGCCCTTGTT TTGTTTTTAA AAGCTGTGCT GTTACTGCTT AAAGTCTCCA AACTGTTATT GAGAACACTG ACCAGAGCCC
TGTCATAGA CCAAGTGTTC TCCAAGTGCA GATTGCAACT CTTTGCAGA GTAGGTGTG GAGCCATTIN AGCTGACTAC
TCACCAGCTT TCTTCAAAT GTAAATGGAA TAGGATAGAA AAATAATGAA AAATTGTAAA GTGAATTGGA TGCAAAAAGG
GTAAATATG TNGTGTGAGA CTTTTTGGG TGAGTGTGCA TGTGTTTACA TACTGNTCA CATTATAACA TGTATTGCTC
ATTATGGGTT GTGGTCAGAA AAAATTCAGN AAACGCTGTC TCAGACTGTC CCCAAGTTGT ATTTGCTTAT AATGGGACT

SEQ ID NO:984: (Length of Sequence = 408 Nucleotides)

GTGGTATGAG GTATCAATGA AATACATTTA AGATGTACAT TGGTTTGTTC CAGAAAGGCG AGACAAGTCA AAGCGGGGAC
TTCCAGGCTA TAGGTAAAT TATACATTTT CTGGTTAAGA TTGGTTGAGT TTGTCTAAGG ACCTGGGATC AACAGAGAGG
AAATGTTTGG NTAAGACAA GGATTGTGGA GACCAAAGTT TTAAGTACGA GAGGAAGCTC TTAGCTAGCA GGCATAAGAC
AGAAGAGGCT GTAAATGTTC TTCTTATGAG ACTGAAAAGG GTGCCTGACT CTTAATTGAT TATCTCCTGG NTCTGGAAAG

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TGCAGACTGA CACAAACACC ATTCAGAACA AGAGAGAGGA GTGTGAAGTG CTTCTCAGCT GGGCTCAAGA CCACTTCTTT
CCAGTGCTGG AAAGAGGGGC TGCATGCACT GTAGGAAAAG CGTGTCTCTG AACTGCCACA GGGTGTCTC GAAAGGGCAG
CCCGGTCTTG ATGCCACTTC TCCATGGCTC CTGTTTTTGG GGGAGCTCCA AACAAAGTGA GAGAAGCTGC CTATTT

SEQ ID NO:973: (Length of Sequence = 401 Nucleotides)

TTCTCAAAC TCCAGTTCTC TTCTGGGCC AAGATCTGGT CCACCACTGC CGTGGCCTCC TTCCCTGGC GGATGTC TC
CCGCTCTGA GCAGAGAAAC TTTCTTCCC AGCAACTTCT TCATCTGATG GGAGGAGGA ACTGAATAGC TTTCCCTGA
GGGAGATAAG AAAGAAGAGT GTGGTGTGA CAGGGAGCTT TGAGCTGTGG AGTTGGGCTG GGCATGGAAA ATNCGGTGGA
GAGTAGCAAG GAATGAGGGG CTTGAGAGAA CTCTNGGATC AGCCCTCCCA CACTCACTGC CCTTTAAGGT ATCTTTGGGG
AAAAAGGG GCTTCTATGA TGAGTCTGGC AGCTNCCAC ACTGCATTCT CCTCTGCAT TTTTTTACCA TGCACCAGGG
C

SEQ ID NO:974: (Length of Sequence = 371 Nucleotides)

TTTACAAATG AACCACTGAG CACCTCAGTA CTTAGCTCAT ACCTCATACC TTAGTTCCTT AGTACTTAGC CTTGTGCCAT
CTTGAATGAG ATGGAGTGAA GTGAAGCTCG AAGGAGTGAC AGAGACATAG TCCTTGCTCT CAAGGGGTCT TTAGCCTGGT
CTGGGGGACA AGATTTCTCT ATCTACCTCT TGAAAGGTGG CAGGACAACT CCACACTGGA GTGTTCTCAC CAGCAGATAG
GTGCTGCGGG AGTGTGGCGC CACATTCTTT ATAGCCACAG GCTTTCTGGG GACTTNCCT GGGGTCTTC CCTATTGGC
TGGGTGGACC ATAAGCGGCA AGTGAATGTG GCAAACCTCA ATTACAATT AA

SEQ ID NO:975: (Length of Sequence = 340 Nucleotides)

GACAACAGAA AAAGAAGTGG ACAGCTACCC TAGATTCTAG CTCACACATA ATTACGCCAG ATAATCATCA TTAAATAAT
ACCCCTTGAA ATTTTTCAGA CTTTTCACAG CTCTAAAAAC ACAACATCAG ACATAACATC ACACATTTGT TCCAAAGGAC
TAAAAATCAA AAGCAATTGC AAAGTATTGG GAATCACTTT TATGGCTTTC CTAAGGACA GTCCCATCT TCCAAGGAG
TGTTTTTAAA GAAGCACTAA CTCTGGTAGG TTATCAAAC ATTTTTTAT TCTAAATAAA TAAAGACTA ACTGAAGGTC
TCAGGTGCAC ACTTATTTTT

SEQ ID NO:976: (Length of Sequence = 343 Nucleotides)

CTGTTCCCTA AATATTATTA AATTTTAAA AATTAGACAT TTGGTCTAAA TTAGACAGGT AAGATACTAC TGTCTTACT
AGATGCTTTA AAGTCATAAA CTGCTCTAT GGCTTTTAT AATTGTCNAA CTTGCTTGCT TTAGAGCCAT TGGATTCTAG
GTAAGGCCTA GAGACATTG GAGTAGCCA TGTCCTTAG CTATGCTAGA AAGAGTCCGA CATTATCTGT GGTCTGTCC
TGTATCTTAC ACTCTACACC TGATACATAA TTAAATATAC TTACTATAA AATAAAAATG GATGCATTTT TTAGGTAGGA
AGGGTATGG AAATTATAGG TTT

SEQ ID NO:977: (Length of Sequence = 265 Nucleotides)

ATCTTTGTAA TATCAGTGCC TAGACTAAGC CTGGCGTATA ATAGGCACTC AGAGATTGA AGAATAAATG ACTAAATGAC
TGTATCAAAT ACTTGCCCAT TGTTTGCTGT TTCTGANITG TACAAGGCCA TCATGATAAT TGATGATCTT AATAATGIGA
GAATATGATT CTTTACCTT AGTAAGAGAG CCATCAGTTT ATTGGATGAT AGTTATATGG AAAAGAAGA AATGCTACTG
TGATAAATAT TTATAATTTT AAACA

SEQ ID NO:978: (Length of Sequence = 285 Nucleotides)

ATGGTGGGCT GCGCTGGCCG AGGTGGCCAA GATGGCACT GTTCTGCTC TCANAAGAAA AGGCACTGAC GCACTGACCC
TTTATAGGTTG TTTGGGGTGT GGTCACTGCC CTCCTGCTG AGGTCAAGT GTGTTTTCAA GTCAACTTCA GCAGACCTCA

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CTGCCTTCTG GGTCAAGCG ATTCTNATGC TTCAGCCTCC CAAGTAGCTG GGATTACAGG CATGTGCCAC CATGCCAGT
TAATTTTGT ATTTINAGTG GAGATGGGGT TTCGCCCTGT TGACCAGATT GGTCTTGAAC TCCTGGCCTC AAGTGATCCA
CCT

SEQ ID NO:967: (Length of Sequence = 365 Nucleotides)

GTGTACATTA TATGTTGTAC ATATTATTNC ATCACCAGG TGTAAAGCCC AGTNCCTAAT AGTTACCTTT NCTGCTCCTC
TCCCTCCTCT CACCCCCCTG CTTCAGTCT ACCCCNGTGT TTTCTTCTTT GTGTCTCTAA GTNCTTATCA TTTAGCTCCC
ACTGTGTAAGT GAGAACATGC AGTATTTGGT TTTCTGTTC TTTGTAGTIT TACTAAGGAT AATAGCCTCC AGCTCCATCC
ATGTTCACAC AAAAGTCATG ATCTCATTC TTTTATGGC TGCATAGTAT TCTGTGGTGT ATATGTACCA CATTTTCTTT
ATCCAATCTG TCATTGATGG GGCATTTAGG GTTGATTCCC TGCT

SEQ ID NO:968: (Length of Sequence = 390 Nucleotides)

GTGTATAGTA ATTTAATAGT AATTAAATGT AGAGTATTGT TAAAAACAAG GAGAGGAAAA AGAACAATTC ATATTGAGA
ACTCCTAATA ATCTTCTAGA GCAGAGTTCA AAGAAGCAGT GGTAAAAATA AAGCCAAAGA GATATAGGGG CTAGTCTTAG
AACCAGGACT TCCTATAGAA CCAGCTTCCT ATAGAATCTG AACITTTATCT GAAACTCTTT CACAGATCTC CTCCACCTTA
ACTTCCACAA AATAAGAAAT TTGGATTTTG AAGGCAAAIT TGTATATTTT AAGGAGCAGG ACAATCTCAG CTGTATCTGG
GTTTGAGAT ATCCAACAAA TCCTACCCAA ATCACTTTTC CAGCTGCAGA CTGGGAATTT CAGATCCAGG

SEQ ID NO:969: (Length of Sequence = 340 Nucleotides)

CAGACAGAAA AAGATTTGAA GAGACGGGTC AGGAAGTAGC GGAATTACTG GAGGAAGAAA AACTAAGTTG TGTGCCAGTN
CTCATCTTTG CTAATAAGCA GGATTTGCTC ACAGCAGCCC CTGCCTCTGA AATTGCAGAA GGACTGAACC TGCTATCCAT
CCGGACCGA GTCTGGCAGA TCCAGTCTTG CTCAGCTCTC ACAGGAGAGG GCGTTCAGGA TGGCATGAAC TGGGTCTGCA
AAAATGTCAA TGCAAGANG AAATAAAATC TAGACGAATG GAGATGCAGG AGCTTCGGGA GCGGAATTCG GGCCTTAAAA
ACACTAATTT GCTGCTTTCT

SEQ ID NO:970: (Length of Sequence = 372 Nucleotides)

TTTTAAGATG GGATCTCAGG GTTACCAGG CTGGAGTGCA GTAGTGGTTC ATAGCTCACT GTGGCTCAA ACTCTGAAC
TCAAATATC CTCTGCCCTC AGCTCCCAA ATAGCTGGGA CTGCAGGCAC ATGCCACCAT GCCTGGCTAA TTTTAAATT
ATTTGTAGA GATGGGGTCT CACTTTGTTG CACAGGCTGT TTGCTTGATT CTTAAGAACG TATAGGGATC CAGCTGTACA
GAGCTTCTG CAGTCTTTTG TAATAGAATT AGTTGTTAAA ATTGTACTTA TTACATGAGG CATCAAAGAC CTGGAATAA
AGCTATTNCC TCACATATCT GGGCCATTAT TTTGGACTTA CTATGGTTAC CG

SEQ ID NO:971: (Length of Sequence = 337 Nucleotides)

GACTATAGAG AACGCTGAAG TTTTGAATAA AAGACTCTAG GGTGAGCTTC ATCAGTGCTT GCTTTGGNTC CAAGATGTAA
TGAGATTCTN CTTTCACGTC AACAAATGCC GCAAATNCTT TCACCTGAGT GGAGCTCGGA GCACCCAGTC TCTCTGCATA
TAACCAAAAC AAATTTGAAT CCAAAGGTA GATGTTGAGA GTCTTGTGG TTCTGCAGCT CAGGCCTGTG AAGTTTGTGC
TAGTCATGTC CACTTCTGGA AAGAGGATAC CTGINCTCCT CAATGTGAGG GAAOGGGAGC TTNGGGGCAT CAACCTCACA
TTTTCTCTC AAGGGGA

SEQ ID NO:972: (Length of Sequence = 396 Nucleotides)

TTCTTTTACA TCAAATATCC TCAATGGAAG AGGGATATT GCACACAAAT ATCATAAAG CACTACATAT TACTTTCACT
GGAACTAAT TTNCTACATT AGATATGACT GGATAGGATA GAAGTGATGC AGGATTATAA GACATAATAC CATAACAGC

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GGAAGACAGG GAAGGACCAG AGGTGTAGGT AAAGCAAAAA GCCACAGGTC ATTAGGAAGT GATGCTCCAA CTGGGCATGG
 AAAAGGAGTT TGGAGTTAGG AACACGACAG ATCTGTCTGG ACAAGGNTCC AGATCTCTCC TAGGGGGAAG NAGGGGCAAC
 TTAGGACAGT TTTGTGTCT GTGGG

SEQ ID NO:961: (Length of Sequence = 327 Nucleotides)

GCTGAAGAGG AACATGTGTC CTCGGCCACT TCAATCACTG AGTGTGACAA ACTTCTCTCC TTGCCCACAT CAGTGGGTGA
 GGACCAATCT NTGGCCTCAC TTACAGCTCC CCAGACAGAG GAGACAGGCA AGAGCTCCCT GCTGCTTGAC ACAGTCACAA
 GCATCCCTTC CTCGGTACT GAAGCTACGC AGGGCTTGA CTATGTGCA TCAGCTGGTA CCATCTCACC CACCTCCTCA
 CTGGAAGAAG ACAAGGGCTT CAAATCACC CCCTGTGAGG ACTTCTCTGT GACTTGGGAG TCAGAGAAGA GAGGAGAGAT
 CATAGGG

SEQ ID NO:962: (Length of Sequence = 369 Nucleotides)

AATTTAGATT TGCAAGTTTT CTACATTTTC AAAACAACAA AACAAAAA CAAAAACAA ACAACAAGAA ACGTAGACTA
 GTTGGGCTCT GTCATGCCA GGACATGAAT CAGCCCTCA TCCAGCTTCT CTGACCATTG GTCACCTAGT GGTCTTCTTG
 GTTTTCAGAT AGCAAGAAGG GTGATTACAG CACGATATTT TGACAGAGAC CACATTCACA TAGCTTTTAT TAGTTATTGG
 TTGCTGTAA TCCTCTACTG TNCCTTGTGA AGCTTTATCA TGGTATCTAC GTAGAGGGAA AAAGCCACGG TATAGATATG
 TAGGGTCCA TACTATCCAG TCTCAGGGCA TCCACTGAGG GGTCTTCTG

SEQ ID NO:963: (Length of Sequence = 278 Nucleotides)

CTCAACACC CGAGGCGGG AGGAAAGAGA AGCCGATGCT TCAGAGCAGA CACTCCTTAG ATGGCTCCAA ACTTACAGAG
 AAAGTGAAA CTGCTCAGCC GCTGTGGATA ACGTTAGCAC TGCAAAAGCA AAAGGGGTTT CGGAGCAGC AGGCGACCG
 GGAGGAGAGA AAGCAAGCCA GAGAGGCCAA ACAGGCGAGAA AAGCTCTCCA AAGAAAATIN GAGATCTCCG ACTCGGCTCC
 CCCAGCGCG CTGGTAAAAG AAGTCACCAA GAGGTTTT

SEQ ID NO:964: (Length of Sequence = 349 Nucleotides)

ACACTCTCA3 TATAGACAGT CGTGAAGAAC AAGGCTGAGG GATTTTNAAG TAAACCCATT TTCAGGATGA CTACAATCCT
 TCCACTTCTA GAAACTTAG AAGTACAAGA AATAGCTCTA CTACGGGTAA CTGATTTAAC AATTTCCCAA ACACCTTTC
 CACTACCCAA GCCCCTGGCC CTCAGAGAGA ACCGGGATGG ATTGCCATCT GGGTTCAGAG GCAATATGAG GAGGTGGGG
 GGATGGCAGG GGCATCTCA GGGTGGGGG GCAGGCCAAG GGGATGAGAT GCCAAAGGAC AGCTTTNGGA ATCAGATAGA
 CGATCCAGCG TGCCCTCTCA CACTTGCAT

SEQ ID NO:965: (Length of Sequence = 361 Nucleotides)

AGCAGCAAGC CAGACGTGAC TGTGAGAAC AAGCTAAAT AGCTGTGGAA GCTCAGAATA AGTATGAGAG AGANTTGATG
 CTGCATGCTG CTGATGTGA AGCTCTACAA GCTGCGAAGG AGCAGGTTTC AAAAATGGCA TCAGTCCGTC AGCATTTGGA
 AGAAACAACA CAGAAAGCAG AATCAGATT GTTGGAGTGT AAAGCATCTT GGGAGGAAAG AGAGAGAATG TTAAGGATG
 AAGTTTCCAA ATGRTATGT CGCTGTGAAG ATCTGGAGAA ACAAAACAGA TTAATTCTATG ATCAGATCGA AAAATTAAGT
 GACAAGGTCG TTGCTCTGT GAAGGAAGGT GTACAAGGTC C

SEQ ID NO:966: (Length of Sequence = 163 Nucleotides)

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TTATAACATT TTGAAGAAAA TCTTTAAAAA TTTTGTGTTA CACAGAAAAT AATCTTAGAA A

SEQ ID NO:954: (Length of Sequence = 217 Nucleotides)

AGAGCTTAAA AATAGTGAAG TCTTTATAAG TAATTTTAA AAATTTAAAC TAGGACCATA AATTTCTAAA CTATGAGATA
AATGANCAAG AAAACAAACA GGTGTTTAGG AAAAGGTATG TATATGGTCA ATGAAATAAA TACAACGTGA TTTTAAATGA
GANITAACAT ATTTTNNTTT AACAAAAGCA GCATGTAAAC CACAATGTAT TATATGT

SEQ ID NO:955: (Length of Sequence = 260 Nucleotides)

TATTTGATAG AATTTTCTAG TGAAACCATC CTGACTTGGG GTTTTATTTT GGAGGAATTT TAAGTTATTA ATTCCGTCTC
CTAATAGTG ATAGGACTAT TCAGATTACC TTATTTTATA TTTGGTGAGT TTTGGTAGCT TGTTGTTCTC AAGGAAGTGA
TCCATTTCAT CTAAGTTGCC AAATTTATGT GTGTATAATA ATTGTAGTA TTCCNGTATT ATCCNTTGA TGTCGTAGG
GTCTCTAGTG ATATCTATG

SEQ ID NO:956: (Length of Sequence = 216 Nucleotides)

CCCTATTAAA TCATTAAGCA TTGCATGCAA TACTTTTNCCT GTGAAAATTA TTAACCTCCT GGTATATAAA ATTATTTCTA
GTATGTTTA AATATTTCCN CIGGGATATT ATCATCTTAG ATCTGTAAAG TGGTACTAAA ATAGTTAAAA ATTATTTNTA
AGATATACAC AAACAGAAAA ATATAAAANC AAATGTATCT TATACATAGT ACTTGG

SEQ ID NO:957: (Length of Sequence = 353 Nucleotides)

TAATGACCAG GTGTGGAGCC TAGAACAGAC ACCAGTCAGA AGTGCAGATA AGGTCTGACT TTCCAGCATA GCCAGGGGAC
TTGGCTGACT CCACATGTCC CCAGGCCTTA CCTAGCTGTA AAGCAGGCAG GTTGTGAAGT CATAGTGGCA GTTTATGAAA
TATTTAGGGG ACCTAATAAT CTTTAAATTG TATAACATTT CTTCATATAA TTTCCCTTCA TGAATCCCTT CATGACTTAG
ACCATCTATG ACATGCTTGG ACTTTCTGAC TTGTCTTAAC CACCCCTCTC TTTAAACAAC CAGTCTTTTT ACTTTAGGAC
AAGAATTTAC CATACAAGAT TCITTTGTAT AAA

SEQ ID NO:958: (Length of Sequence = 410 Nucleotides)

AAGGAATGA ATTTGATAGC AGATTGTTAG AGATTAATTA CCTATCATAT GCCAAAGCCA CTTCCTACAT GTCAGTGCTA
AGGAATCCCC TAGAGATGGA ATTCCTAGGT TCAACTGAAA ATTAATTGTA ATTAATATAA TAGGTTAATT CATGTGAATT
ATTTTAAAGC CTTTGGGCAA TGAGTTAATT CCACAAGATC CACATGTCTT GAAGTGTAC AGAGAACACT TGATGAGAAT
GTNCTAGTAA TAAACCTTAA CCTCTGGGG AAAAAATCCT ACTGTCTTTC CTCTGCTT CGTTCTCTCT GGAACATATT
TNGGTGGCAT TTGGATATCT GGAGACAAA GGGATCCCTA CAAGGTGGNT GCATAAACAT GCGTGGGCC AGATGGACTG
TGCTCATTTG

SEQ ID NO:959: (Length of Sequence = 197 Nucleotides)

GCCCGGCGAC CGTAGCATCT TCTGGACCAC AAAATAGAAC ATTGCCAGGC AAGGCAGGC ATTGGGGAA TTTNAGAGAA
AGCAGGATGA GTGATGGAAT TGGGAGGGTG GCACAAGATG TTAAACAGCA TATCTTAGTC CTCATCTAGG GTATAAAACA
GGACCCATGG ACTCTAGCAT CCTGGAATGA CAGAGGG

SEQ ID NO:960: (Length of Sequence = 345 Nucleotides)

AATAAACTTC TGTGTGTTTA AGCCACCTAG TTGTGGTCA TTGTTATGGC AGCCTTTGGA AACCAACACA CCCGCACATG
GCGTGTITAA CGCAGGCTGA TACAACCTTA AGAAAGGAAT GGNITGTGTC ATCAGCAATC TCCAATACCT ACAGCAAATG

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SEQ ID NO:947: (Length of Sequence = 335 Nucleotides)

GGAGGTGCAT TTNCTOCCCC TTGAAAGAT TTATGTAGAT TCCTAAAAGA AAATTCAGAA TATGGAGTAG CTCCTGANTG
 GGGAGATGTT GTTAAGCAAT CTGGATTCTT TOCAGAAAGC ATGTATGANC GTATTCTCAC TGGTCCCGTT GTGAGAGAGG
 AAGTAAGCAG GCGGGGGAGA CGGCCTAAAA GTGGAATTGC AAAGGNCACA GCAGCAGCAG CTCTGCAATC TGCCACCACT
 GTTTCAGGCA ATCCTTTTGT TTAAGCCAAT GGACCTACTT CCAGGGNGTG GGTCTCACA AACTTNTTTC AGGGCCTTAC
 AACAAAAACC TACAA

SEQ ID NO:948: (Length of Sequence = 216 Nucleotides)

GGATGTAAGC TCCAGACAG ACATCTCGGG AAGCTTCGGC ATCAACAGCA ACANTCAGTT GGCAGAGAAG GTCAGATTGC
 NCCTTCNATA TGAAGAGGCT AAGAGAAGGT TCGCCAACCT GAAGATCCAG CTGGCCAAGC TTGACAGTNA GGCTGGCCT
 GGGGTGCTGG ACTCANAGAG GGACCGNTG ATCCTTATCA ACGAGAAGGA GGAGCT

SEQ ID NO:949: (Length of Sequence = 369 Nucleotides)

CCCTTCCTCA AAAGATAAAA ATCTCTGGCA GAAGAAATAG TTACCTGCTG CCATCCATCA GTACTGCAAT TACCATGACT
 CTAAGTGACC TTCTTGCCCA ATGTTTAATG CACAATGGAC CGTCCCCAGG GAGACCTGGG CATNTCTGT TGCNTTGTTC
 TACAATGATC CCTCTGTTC TAGCAGCGTG ANTCACGTG GGTCACTC TCTGAGGACT GTACGCATTT TCACCCTATA
 TCCACCTGTA CCAGAAAACA TGGACATAAT TTAAAGTTTA TTCTACTTA ATAGAGTGAT ATTCCAACCT GTGTGGGAAA
 ATAACCATIN GTCACTCTT AAAGGAATGG TATTTAATCAT TTATTTATA

SEQ ID NO:950: (Length of Sequence = 288 Nucleotides)

AATGGTGAAA TAGAAGTCCA ATTACCTGGG GAAACTTCAT CTTAACCTC TGGAAATTNC AGTCTAACCT AAATATTGAT
 ACTACACCTG CAGCAGCATT TAGTTAGCA TGTAGTGAAA AAGTAAGTCT AAAAAATATT TNCATAATCT TTGGTTCCTA
 AAATTGTTTT AAAAGAGATG CAGTGACATA TGTCTGGAGT TTGCTTATGG CCAATAGGTT AATGCTTCTA GCTTCTATGC
 TTATTGCAAA TTTTAATTAT GTGAATATGC AATTTTCACT TATATTG

SEQ ID NO:951: (Length of Sequence = 302 Nucleotides)

TGTCAOGATG TTACAAGAAC GATTCCGGGA GTTINCCGA NACACGGGGA ACATTGGGCA GGAGCGGTG GACACGGTCA
 ATCACCTGGC AGATGAGCTC ATCAACTCTG GACATTGAGA TGCCGCCACC ATCGCTGAAT GGAAGGATGG CCTCAATGAA
 GCCTGGGCGG ACCTCCTGNN GCTCATTGAC ACAAGAACAC AGATTCTTGC CGCTTCCTAT GAACTGCACA AGTTTTACCA
 CGATGCCAAG GAGATCTTTG GCGGTATACA GGNCAACAC AAGAACTNC CTTGAGGAGC TT

SEQ ID NO:952: (Length of Sequence = 302 Nucleotides)

TTTTTTTNT CCACTTCACA GTTGATGCCA ACCCAGCCTG CATCACAGAG ACATTATAT CCACTGAGAC CTCAGTACA
 GTTCCATGG ATGCAGGGAT TGCNCAGGCA TTCGTTTACC TGTNAGTAGC AGCTGGGGTG ATGGGGTCCC TCGGGGCATA
 TACAGCGGAA ACCATTGACA CCGTTGATAC ATGTNGCACC CTGCGACAG GGATTGGNGG CACACTCATC AATGTCAATG
 TTACATCTCT GGCTGTGAA ATCCTGGTGA GCAGACAAA CTGTAGCGAT TAATTGCCAT CC

SEQ ID NO:953: (Length of Sequence = 301 Nucleotides)

GAAATNAAC TTTGTTTGAA AAGTTAGTAT GGGTTAGAAA TGGGAAGAAA ATCTAAAATG TAAGAGTAAA AGCAAGGCCT
 TCATGGCATT CTCPTTTAAT ATGGGCTTIN CTGTGTTAGT TAACATCTGA TAATATGACC CCCCAATCTA TTAATATTTA
 TTATACTCAT AAAATTACAG AAAAAACCTA AGAAAGGGTA TGTATTGAAG TGGAAATGAAT AAATGCAAAA AATGTAGTAC

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GTAATCCAG CTACTTGGGA GGCTGAGGCA TGAGAATTTT TTGAACCCGG GAGGCGGAGG TTGCAGTGAG CAGAGATCAC
 GCCACTGCAC TCCAGCCTGG GCAACAGAGC GAGACCCTGT NTCAAAAACA ACAAATAAA TTTCCTTTTA ACATCTGINC
 CAAAATGAG ATAAGOGTFA TCAGGGCAAG TCCATCCTCA TCACTCTTTC CCTCCOACT GCCCTCTCCA CGATGCCAG
 CTGATCAAAA GTCAATTTTA CTCATAAGAC CAAAGTATCA TGGGATACTG TGCAGTINGA GAGCAGGTTG ANCATCAGAA
 ATAATTGCTG ACAATAAAGT AAAAGATGGG AGAAAAGCAA GGCCNATTGT ATATAATACA GCTTC

SEQ ID NO:941: (Length of Sequence = 406 Nucleotides)

GGTAACAGGT TTTTACCAAC AATGCTTGT AGCTAATGTA GAACATACTT GAGAAAATGG CTTCTGTGAA AGACCAGTTA
 GTACCAAAAT AATCTGGCCC AGAAAAATAG CCACCATTCT TGACTACATT AATAGAAATA GAATAACCCC CAAAGGGAGA
 TGAGAAGCAT TCTAAAGTGC ACTGATCATG AGTTTCTATG TGATGATTG TGTCCATTG GAGCTCCAGT GCTTTAAAGC
 TGAAATGAAT CCTGGCCTTT CACCACCTC CCTGCCATA GTATGGTATA TCCTCTTATT CCTTCCCTCT TAGCTTACTG
 AGAGTGTAAAT TTCCAACCAG TTAAGGCCAA AGAGGACTAT TTTCTAGGAA AGGAGAGAGA GATGAATTAG CAGTTAATGG
 AGGAGT

SEQ ID NO:942: (Length of Sequence = 296 Nucleotides)

GATGGCTCAT GCTAGTTCAG CAAATATTGG GCCCTTCCTG GAGAAGAGAG GCTGTATCTC CATGCCAGAG CAGAAGTCAG
 CATCCGGTAT TGTAGCTGTC CCTTTCAGCG AATGGCTCCT TGAAGCAAA CCTGCCANTG GTTATCAAGC TCCTTACATA
 CCCAGCACCG ACCCCAGGA CTGGCTTACC CAAAAGCAGA CCTTGGNGAA CAGTCAGACT TCTTCCAGAG CCTGCAATTT
 CTTCATAAT GTCGGGGGAA ACCTAAAGGG CTTAGAAAC TTGGCTCTC AAGAGT

SEQ ID NO:943: (Length of Sequence = 223 Nucleotides)

GTGCCATTAC AACTTTNCTG TAACCCTGAA ATTGIGTCAA AGTGAAATTT TTTTAAATGA GATTATAAGA GCATAATCAA
 ATTGGAATTT CCTTAGGATA CCAGAGAATC ATTINCTTCT CAGGTAAAGG ANTTTTCCTT TTTGTAGTCC AGAGCTATAC
 ATGATTAAGA AANTGTTTCA NCCAGGAAGA TGACATCTCT GCTAACCTAA TCGATTATCA TGG

SEQ ID NO:944: (Length of Sequence = 327 Nucleotides)

CCAGGCACTC AGGCTGGCTG TCCCTTNNNT CCTCCGCCC ACCCATCCA CTCGAGCAT CAATGCAGCC GGCCAGTTGC
 AGGCAACCAG GCAGACCCCT GGCTGCCCAG GCAGGCTAAG AGGCCCCAC CCACTCCCC CTCTTTGCC AGTGGAAAAG
 CTGCGGTAG GCATAGCTTT CCCAGCCTTC CCTGCTTCAN AGGCAGGAGC ATGGCACTCT GGGAGTTGTA GTGCTCATAA
 CACTCAGGCG ATCCCTTGIG CAAATAACTG GAGGAGAGGA CTATGGTATT GGGGAAGAGA AATTNAGGAA TAAGCAAGGA
 GTTGGCT

SEQ ID NO:945: (Length of Sequence = 222 Nucleotides)

CTTAAACAAT AAATACACCT GAGTTAGTTT TCCAAACCTT TCCTCTGAT TAAATGCCCT TAAACTTAA ATCTCTTGTT
 ATCTTCAGTT GTGATCTAGT CCCAAGTGGA AATTACGTTT AGCTTTAAAA CCATGAATTT AAAGCTCAAG CCTGTAGCTG
 GCTGCTTAGG CANTTTATGA TTAGTTTAC AGAATAGCAC CCACTGGCTA CACAGNCCC AG

SEQ ID NO:946: (Length of Sequence = 286 Nucleotides)

GCTCTCTCTA CCCCCATC TAGGTATGTA TATAGCTCAT TTATTTAGGG GTGATGTAA AAAATTGAAT GCCCTTAATG
 GCAAGGGAAC CAACCAATCA ATGTGGATGC CACAACCTTT TCCCCTGTTG ACTGTTGTA TTGGTATGGA AGTATTTT
 TTTTCTCCA GCTTTTATTT CAGGTTCAAG GGATACATAT GCAGGTTTGT NACATGGGTA AATTGCATAT TGTAGGGGTT
 TAGTATACAG GTTATTTTAT CACCAGGNA ATAAGCGTAG TACCTG

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SEQ ID NO:934: (Length of Sequence = 336 Nucleotides)

GGGAAAACGT ATCAGCACAT GAAATACCTT GTAACATTTT CATTATATATA ATTTGCTACG TGTTCCTTGC AACATAGTGA
AAAATAATCA TGTCTGATGT TTAGTAGGCA CATAATAAAT AGTAATGGAA TGAATGGTTG TATATTTAGA GAGCCATGCT
GAAAGGTAA ATAGCAAAT ATGACTACTT GGAGAATAAT GTTAAATTGT CAAGGAGAGT AGTGTATAT GAATACTCAG
ATGGATGAT ATATAGANAA TGAGAAAAGC GACAGAAGGA ACTTAAAGAG NTTTTAAAA TAGCTTTGTC TAAAGATTAA
AAATTAAAGG TTCTAA

SEQ ID NO:935: (Length of Sequence = 383 Nucleotides)

AGGTAAAGAA ACTGCTGAGT GGGCTCCTTG TACCAGCACC AACCAGCAGC CCITGACAGC ATAGATGGGA TGAGTGTAAAG
GGCTATCCTT AGCATAAGGG AAAGACGGTT ATAAGCTGAG AAGATTGAAA GAAGAATGGA GCCACAAAGA GAATAGCATA
AATAACAAGA AGGAAACATG AAGAACAAGC ACTTAAGNTA TTAACCTTCA GTCTTTCTCC ATTTCTTGAT GTCTAATGAG
GCAAAATAAC TGGGCAAGGA CCACCAAGAT GAAGAAGTTA AATAAAATGT CACAATGAAA TTNAGGTGCA ATAATACAAC
TGTTGACTGA CTTTCCAAAA CCACGGTGAT CGGTAGAGTA TCATCAATGT TACCGAGGAT TTT

SEQ ID NO:936: (Length of Sequence = 204 Nucleotides)

GAAGCTGTGC CACCTTCIN AACTTINATG AGCTGCCINA GCCGCCAGCC ACCTTCTGTA ACCCAGAGGA AGTGGAAGGG
GAGCCCCTGG ATGCCCCCCA NACCCCAACT CTGCCCTCAG CCCTTGAGGA GCTGGAGCAA GAGCAGGAGC CGGAGCCCCA
CCTGCTAACC AATNGCGAGA CCACCCAGAA GGAGGGGACC CAGG

SEQ ID NO:937: (Length of Sequence = 386 Nucleotides)

CTAACTAAAT AAGGGTGGCC AGATAAAGTA CAGAAGGCC AGTTAACTT GAAATGCATA TGANCAAGAA ATATATTINA
GTATGANIAT GTCTCATGCA ATATTGCGA CATAATTATG CTAAAGAAAG TATTCACAGT TTINCCAACA TTCAAATTGG
AATGAGTGTG CTGTATTTIN ATTTGCTAAA ATGGGCAACC CTAAGCTGGT ATCTCTACAG TTACATACAC TTACCAACCC
CACCCATTCA TACTGGTCCA AGTTACACCC CAAAAGAGGG CAGAAACAGA ATCTGAACAA GCTCAAGTTT NGAGGGCAAA
AATGTTTCAT TCTGCCCTCT GGATINCTGT ATGAAGACTT TTGTGTGAA AGATATGAAT AGAACC

SEQ ID NO:938: (Length of Sequence = 349 Nucleotides)

GACACTTCA GAATTAAGAA GCCTTGCCCT CTTTGGGTGT CTTCACAATT GINTTAAGTC TATTATAGTA TTCATTTTAG
TTTGAAAGCA ATAAATACAA TATTAGTACA AGCACACTGT CAAGAAATCC CTAGAATATG GCTCCTCTGA AGGTTGACAT
GGGTCTGCTT CGCATGTATC TTITCATCTC CAGCATCCAG ATCAGAGTCA ACAACAACAA CTCTACAAAT ATCAGGCTTC
TTGGTGGAAA GAAATCTGGA CATTTTINCT ATGAAAAAAA AGTTAGGTTA CATGGCATTA ATATTTTTCG TAGACTTAAC
CTACAGAAAA TGTTCAAGC TTATAAAA

SEQ ID NO:939: (Length of Sequence = 374 Nucleotides)

GAAATAAGC CTCACAAGAA ATAAGGTGCT TATGGTGTTA AGTTACAATG GAAAATAATC AATGGCAITTT GTATGCATGC
TGATGTGTG ATGTAGATCA GTTCATAGGA GATGGGGCAA CAAATAAATA TCACCATGGG GATGTGATCA TCAAAACCCA
GGCTGTGGAA AACTGTCTAGT CAAGTTTCTT CAACATATTG CAAGAAAAAT ATGATGGCTT GAAAATCTAT AGATGAAGCA
ATTTAACAAA CCTACCAATC TCATTTAATC TTGATTACTT TTAATAAAG ATTAATAAGA TGACAGAGAA AGGGTTTAAA
AATTGTAG ACACGGCTGG ACGGTGGGC TCACACCTGT AAATCCAGCA CTTT

SEQ ID NO:940: (Length of Sequence = 385 Nucleotides)

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SEQ ID NO:927: (Length of Sequence = 286 Nucleotides)

GGCTGTCTAG AGAATCATT GAACCGGGA GGGGAGGTT GCAGTGAGCT GAGATCATGG CACTGCACCC TAGCCTAGGT
 GACACAGCAC AAAAAAANC AATGTTCCAC AAGTCAAAA TTGTNTTCAG GGAGTAGAAA AGTAGTAGGC TAGGTATCAA
 AGGGTATGAA TGACTAAGTT CCTCTATAA TATATTGACT ATAGGTTAGG AGATACACTT TCAGTTCCTG TTTTNGTAG
 ATCTCCCAAT GATCTGTCT TTAAGAGTAC ACACGATGAG TGGAAA

SEQ ID NO:928: (Length of Sequence = 349 Nucleotides)

CTTGTTTAAC CAGTATTTAT TGCACATGGT TTTGTTATCT ATTGCATGTG GTAAATTACC CCATCTTTG CTTCTTAAAG
 CATTAGACAT TTCTGTAGGT TAAGAATTCA GAAGCAGCTT AGCTGAGCAG TTCTTGCTCA AGGTCTGTCA TGAGGTTGCA
 GTCAAGGAGC TGGCCAGGCG TGCAGTCAIC TGAAGGCCTG ATTGGGGCTG GAAGACTCCC TTTCCAGATG GCTCCCTCAC
 AGGCTTGGCA TGTCAAAGCT GGATGTGTGG CAGGGGACCT CCATTCTTCC CCACATGGGC ATCTCCATAG GCTGTTTGAC
 ATGGCAGATN GCTTCTCCA GCAACTGGG

SEQ ID NO:929: (Length of Sequence = 395 Nucleotides)

AGAGGAGGCA GCAGCCACCC CCAAGAAGAC TGTACCTAAA AAGCAAGTTG TGGCCAAGGC CCCAGTGAAA GCAGCTACCA
 CCCCTACCGG GAAGGTTTCT AGCAGTGAGG ATTCTCCAG TGACGAGGAA GAGGAGCAA AAAAAACCAT GAAAAATAA
 CCAGGTCCCT ACAGTTCAGT CCCCCCGCCT TCTGCTCCCC CACCAAAGAA GTCTCTGGGA ACCCAGCCTC CCAAGAAGGC
 TGTGGAGAAG CAGCGCCCTN TGGAAAGCAG TTAAGACAGC AGTGATGAGT CTGATTCAAG TTCTGAAGAA GAGGAAGGAA
 ACCCCCAACT AAGGCGAGTA GTCTCTAAG CAACCACTAA ACCACCTTCA GCAAAGAAAG CAGCAGAGAG CTCTT

SEQ ID NO:930: (Length of Sequence = 214 Nucleotides)

ATCCAACAAT GACAATCCT CTTCGGACAA TATTGGCACT CCATTCAAAC CTTGTTTCAG GTCAGTCCGC ACTTCATCAT
 CTCCCAATTT GTCCAAACA TACTGTAGCT CAGTACAGT TTTTAAACGT TTCTGTNCAG CTTCTTCTCT CATAAGCTGC
 TCCCGACGTG CTGTCTCTT NATGTGTTTC TGAATATCTT GACTTAGTGC CATG

SEQ ID NO:931: (Length of Sequence = 245 Nucleotides)

GAAAGTNTTC ACAATCATGA TGCTATCTA ATAAATATC ACTGAGCAAT AAGGAGAAAT ATTTTAAATA GATTGAAGT
 TGTGAACAAA TAATTAGAG TCCAAAGAGG ANAAAGANAA TTAAGTCTGT TTTTATCCC TAGAACTCAG AAACITTTACT
 GGATTTGTCA ACAAGACAA ACTTTTATT GTATAAACA GTAGANTTCA TGGAAAGGAT AATNCITTTG GAACAGGCTT
 CTCGG

SEQ ID NO:932: (Length of Sequence = 303 Nucleotides)

CATATTGGGG GCCAATATA AAGCAAAGCT GGAAGAAGGG ATGATCCATG TATTNTGGG GATGGGATAT GGACAGGGAA
 ATAGTGTTCC AACTCCATGC TGAGTGTGT TTTGAATTGT AATGTGAAGT TGCCACCATA CCAGGGCTAT GACTGTNTAC
 GATGTCTCAC CCTGTAGGC TAGTAGCTTT GCAGTGGGAA AAGATGACAG GGCCACTTGT CCAGGGCAIT CAGGTAAATA
 AGTCCCTGAG CTCCAAGTTG CTAGATCTAA GGAAGTATTT TTCCCTTCAT GTCAAAGATG GGG

SEQ ID NO:933: (Length of Sequence = 186 Nucleotides)

CTCTTTTGGG CTG-ITCANA TCTCCGGCGA ATTGAAAGCA GTGATCTCTC AGGTGCTAAC CGGNATAGTA TTAGAAGACT
 CCAATATCTT GCAGCCTGTG GGACTTACTG TATTATCTT TGTTTTGTTT CATTTGCTTT TGGGTCTCTG GTCATGAGGT
 TTTGCCAAG CCA-IGTCTT CAAGGG

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SEQ ID NO:920: (Length of Sequence = 299 Nucleotides)

CCCAGGTACT CAGGGAAGGG GCAGGAGAAC CACTTGAGCC AAGGAGTTCA AGGCTGCAGT GAGCTGTGAT CACACCACTG
 CATTCCAGCC AGGACAACAG AGTGACATCC TGCTCAGAAA ATAAATAANT TTITTAATGA TGAAACTAAC TAAGGTACTG
 AGGAGGTAAG ATATTTCCCC ACGGTAAGTC ATTCAGAAAC TAAATGTGAA AAACCAAAAG AAGCCTCTGG GGTTAGTATT
 CCCAGTCTCC TTGTCTGCCC AGGACCCAC ATTTGTGTAA GTTGCTAATT GCACAAGGG

SEQ ID NO:921: (Length of Sequence = 234 Nucleotides)

ATGAAGCAGA GGCAACCAAC AGAAATTGAC ATCAGAAACT CTGCTGNTC CCCACCAGCA TGCTACCGAT GANTCCTGCT
 CTCTTTTCTG TGAAATTTTA TTTTNTNCC AATAAGGCCA GCCCTACCCCT GGAATCTGGA ACCANTCTG GCCCAGGTA
 GAAAGGCTAC CAAGCACCTA TGGTAGAAGC CTTGGTGTCC AGGATGCTCT TGGNCTTAT TATTGACCTT CTCT

SEQ ID NO:922: (Length of Sequence = 328 Nucleotides)

TAGCAGGGTT ACTGGCCTTG GCTGCGGCCA AGGGAAAACCT CTGCAGGCC TATTACTTGG CGGCCTTTAA CTCTTATAGA
 ATTGGGAGAG AACACTGACA AAAGCGAGGA CATGATTTIN CGTTACAAA TNATTTTCTT TGCTTGCTTT CTCTCACCC
 TTTTNAATTT TCTTTTCTIN CTTTCTCTGT CTATCTTACC TTCCCTCGT GATCCCTGCC AGCCCTCTCT TTCTTATTAT
 AGCTGATCAT GGCAGTATTG TTTTNTNCTG GGTAAAAATC AGAGTGGGAT TTAGAGAAAG CTAGCAGGC CTAGCATGAG
 GGCCTTAG

SEQ ID NO:923: (Length of Sequence = 371 Nucleotides)

CAGGAAACCT ACTGTGAAAA TGCAGAAAA CAACAGCAA AATTGATGTG TGACTCAATA TGATATATAG TTCAAATGTA
 AACAAATGCT TGINAGCATT CCACATCACT GAAGGAAAAA AAGTAAGTA TTATTTCCAA TGTTGGGAGT TAGGTTGCTA
 TAAGCTTATG ANCACACACT TTCAGTGAAT TTATGTAGAA TCGGAAGCAC TTCATTCTCC CCTCACCACA CATCACCCCC
 TTGCTCTCC TCGACACGTG CAAAATGATA GGGCATGGTA GGGGTTGTAG TGAAATNGAG AAGGCATGCC CCATCTCAAG
 AAACAGGGTG GACCAGCCAC AGCTTTTCTG TOCANTTGT GATACAGGAA T

SEQ ID NO:924: (Length of Sequence = 371 Nucleotides)

ATGATCTGCT TTTTITGAT ACCTTTACTT TINAGT AGNGCGGGG TTTCTGGAGC CGACTGAGGG ACTGGAGAAG
 GCTACGGGGG TCTTCGCCCT GCCAGGGCAA TCTTTT CTCTTATCA TTGTTTATG CAAATCGCGG TAAAGTTTTT
 CGAAGGGGG TGCTGGCTCC TCTTGGCAGC TCTTCATGCT GACTTTGGGC ACCAGGGCTG CTCATACCTG CAGCCTTTTC
 GGCCCTCTNG GCCCGCAGGC GTCCGGCCTC CGAAGCACT GCCATGGCCC GGAATAGCAG CCCGAGCA AGG

SEQ ID NO:925: (Length of Sequence = 317 Nucleotides)

AATGCTTTAT GATCAACTTG CCATAGGACT GATGGATTAA CCAGTGTTCG GCITTTATTG AAGTCTATGC CCTGCACAGC
 TCTTGATATG ATTINAGATG CTAGAAGTTT TTINAGCATG TNATGTGTA TTCTTGTTG AATTCTAGGN ACCTTGTTCA
 ACTTGGTTCT TTTTCAAGGT TGTTTGGGT ATTCGTGGTC CCTTGCTTTT CCATATGNAT TINAGGATCA GCTTGTCAAT
 ATCTGCAAAA AAAAAATCAG CTATATTTTG ATAGAGNITT GTATTGCATC TTTAGGANTG GTTTGTGAG TATTGCC

SEQ ID NO:926: (Length of Sequence = 247 Nucleotides)

GTTATTCATA CCACAGCATT TAAAAAGCAA TCCGCAAGIN ATAAAAAAA AAAAAAAA ATGATGTGAC ATATCCATTG
 CCTGANITGC CTCTTTTGTG AGCCAGINIT GGGATTATAG CAGAGGAGTA GCAGAAATAA NTATATTCAG ACACAAACAT
 ATAGATATAA TAATATCCAA CCNCTTTATA TGATTTAGGG TCTCGTTAAA ATGGTTACCA TTTGCTTCTC CTAAAAITA
 TATAAAT

SEQ ID NO:914: (Length of Sequence = 389 Nucleotides)

TTACAGGCGC CTGCCACCAT GCGCGCTAA TTTTINAGTAG AGATGAGGTT TCACCATGTT GGCCAGGCTG GTCTCAAACCT
 CCTGACCTCT GGTGATCTGC CCACCTCAGC CTCCCAAAGT GTTGGGATTA CAGGCGTGAG CGACCGTGCC TGGCCTTCTC
 CACTGTTTTT ATAGTGAAGA AAGGACACCC AAATTTTGAT CTGGTTCAGC TATTCACTAT TCTATCCTGT GTGGTCTTAA
 GCAAGTTACA TAACTTGCCT ATATCTCAGT TTACTTAGCT ATAATATAAA TTAAATGGT CAAATGTTCT CTAAAGTCTT
 ACTAGTTACC AGTGTTCAT GGGCCCAACA GCATCTACAT TACCTGAGGA GGCTGGTAGG AAATGCAGG

SEQ ID NO:915: (Length of Sequence = 328 Nucleotides)

CNCCAGCAGA TTTTINATTAG ATGGAAGATA ACAAGCATT A CCNATAGGT AAGTGGTAAG AAATGGCAAG TACAGCCAAG
 CCACAGAGGA GTGAGGACAT TACTGGCTAT GGAATGGGT ACTTATGAAA TCTAAGGGT GGGTCTCTG ATGAACCTCTA
 ACTACCCAGT AAGCTCTTCT CTTTGGCACT CAATATGACC NCTGCTGGCA TGAAAGGGNC TACAGTAGCT ACTTTCAACT
 TGGCCAACAG TTCTTCAGT TCTGGTCGAG CTTTGAATCG TCCCTTGAA GTCTTCTTC AGNIGGTGCT CCTTCAACTT
 GACAAGTC

SEQ ID NO:916: (Length of Sequence = 365 Nucleotides)

CAACTTCAAG GTGCTGCAAG AGCTTCAAG AAGATGGGTG TTGACAAAT CATTCCTGTA GAGAAATTAG TGAAAGGAAA
 ATTCCAAGAT AATTTTINAGT TTATTCAGTG GTTAAAGAAA TINTTTGACG CAAACTATGA TGGAAGGAT TACAACCTCT
 TNCGGCGCG GCAGGGCCAG GACGTAGCGC CACCTCTTAA CCCAGTTCCA CAGAGGACGT CCCCCACAGG CCAAAAAAC
 ATGCAGACCT CTGGCGGCT GAGCAATGTG GCGCCCCCT GCATTCTCG GAAGANTCCT CCATCAGCCC GAAATGGCGG
 CCAATGAGCT TGATGCCAA ATTCTTTGAA CTCAAACCA CAGCT

SEQ ID NO:917: (Length of Sequence = 400 Nucleotides)

GCATTATTTA TTGAAACTA TGTATTTTT TTGAAAAACC TGATCACATA GAGAAATCA GTGGCTATAC CCTCTCTGGG
 CATCAGTTTC CTCATCTGTA AAGTGGGAT AATCAGAGC CCCACCACAG TGGGCTCAG GGAGGAATAA ATGCATTAA
 ACATGGCAAG TCAATTAGGA CGGTGCTGA CAGGCTGTA GCGCCCAAGG TTGTGACTTT TGCTTTTCTT ATGTCTACTC
 TGCAACCAAC TTTAGATAGT GGTAGANTAA TCAGGAGGCC CTCTTGAATG GGATATTTG CACAGAAGAG GTCCAGAGC
 GAGTGIGTGT GACATGGGAG CAGAAGACC GGGGTTTINAG CCAGGCTCTG CCACTCATAC GGGTACAAAT TTTCAAAGGG

SEQ ID NO:918: (Length of Sequence = 348 Nucleotides)

CTATTCACA TGGTAACTCT GTCATACATC TATAAAGCCT AGTAGCTGTA TTGGGTGAGA TGAAAAAAC TGCTTATATT
 CCACAGCAAC ATAATTACAA ATAAGTTTTA ACCTATTAAA GTACAGAGTC TCTCTCATCA CTTTCAAAGC AGGACCTTAC
 TTACCAATAA TTCATAGCAT ACCTCCCTT ATTTTAAAC TCATATGATA GCTGATTCC TAACTGTAGC AATCAGGATT
 CTTAGAAAGA TTGAAACTG AATTTAGCTA ACTAAGGAAG CGGATTTTAT TAAAAATATT GGGTTAGTTT ACAGGAATCA
 GTAGTGGAGG AACCAGGGTT GCATAAAA

SEQ ID NO:919: (Length of Sequence = 345 Nucleotides)

GGGATGACTT TAAACGAGAG CTGGACAGTA TTAATCCAGA AGTCCTTCTT GGGTGAAAG GAATGAGTGT TTCANACTTA
 GCTGACAAGC TCTCTACTGA TGATCTGAAC TCCTCATG CTGATGCACA TGTGCTATT GATCAGCTGA ACAGAGAGCT
 GGCAGAACAG AAGGCCACCG AAAAGCAGCA CATCACTTA GCCTTGGAGA AACAAAAGCT GGAAGAAAAG CGGGCATTTG
 ACTCTGAGT AGCAAAAGCA TTAGAATATC ACAGAAGTGA AATNCAGGCT TGAACAGGAC AGAAAAGATA GAAGGAAGTC
 AGAGGATNCC ATGGGAAAAT GAAAT

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GAATAGAGAA CCCAGCTGAG CGACTCATGC TTNACCAAAA ATACCCAGAG CAGTGTGTCT CTACCTTTTT AAGCCCATGC
TCACTAGTGG GGAAACAAT TTTACCCCC TGTATTAAA TATGGGGATT TCAAGGCAA CAAAAGCATT

SEQ ID NO:908: (Length of Sequence = 207 Nucleotides)

CTTGATACA GGTGGTAAAT TATTACATTA TTCTCCTC CTGTCTACCT GCAGTTGGTT TTATGAGGGG CGTTAGTACA
CTTCCCAAAG GGCTGCCCCG CAGGTINAGA GGTGCACATT GAACTCCCTC ACCAGGCAGA TGGGAAGTGT GGCCATGAGA
GAGAGCTTCA GGGGNCCTNG GNTTAINACA TCGCTGGGCC AGGANAT

SEQ ID NO:909: (Length of Sequence = 339 Nucleotides)

GCAAGAGAAC CTGATATAAT ATCTATAAAT TTTGATTCCC TGGGGTATAA CAAGTAAATA AITTTTAAAT GGTGCTTAGC
AAGATTGGTT CATGNAAT GAAGCAATTA TGGCTTGANT TTATATGTAC AATATTTATT GTCTTAATTT TAATTTAAAA
CGAATGACAT GTCTCTTTTT TTAATAAAG TCTTCTTTTA AAGATCTTGT AGTTGATGTG ATGAGCTATG CACTGCTAAA
TATTTATCCA CACATAAATA TTGANAAGG AATATGGNAT AGTCATGGGA TGTAGTTTCA TCTCAGTGCT CCATGGAGGG
AGTGTTTTCA CCTCCTCT

SEQ ID NO:910: (Length of Sequence = 372 Nucleotides)

CTCAACTGCC ACTCACCTAT CTACCATCCA CTACCCANIN ACCACCCACC ATGACCCACC ATTGCCATC TACCCATCCA
TCCATTCTAT AAATAATTAG TAAGCACTTA ATGCATGCTA GGTATTATTT TAGGCACCAG TAAGACAATC ATGGGNAAAA
AAGACAGACA ACCCCGACC CTCCATCCT CAGGGAGCTC TATTCAGTG AGAACAATCA ATGTGCTAGA TTGTGAAGGT
CATCAGTGCT TGCTGCCCCG GTAAGACTGA GGTTCACAG CCGGAGGACC AGCTGGGCC AGGGCTTCCC AGGGGTCINC
TTCAGGGGA CTCTCAGGAG TCCAGCTGCT GCCCCTTAGC TNAGCACTG GG

SEQ ID NO:911: (Length of Sequence = 377 Nucleotides)

GAACCTCAA AAAAAAAAAA AAGAGGAGTC ATAATAAATA TTINACTGTC TAGTCAACC AATTATGAA GCCTGATTAT
CTAGCTNAGC CTCGGAGAT TGCTACCGGA AATCTCCCA GATGTTCCC CTCTAACCT AACTNCCAC TGINTGCCAG
GAAGCAGCC GGGCATCTGC ATTCCGAAG CCCAGCTGCT TGGGAAGAGA GAGGGAGCGG CCTGCACGTN ACTCAACAGC
CCTGCTGCT AACCAGTAA CCAGTTCTCA GTTGGGTICA CGACCCATG AGCGACCCAG CTTCTTCCC CTCAGGTGA
TATGTGCTC CAAGCTNGG GATGCCCCGG GGGACTATGT GGAGGGAGAG TTCCTTA

SEQ ID NO:912: (Length of Sequence = 370 Nucleotides)

ACAATCTACT TGCTACAGAA TCAGGATGTA TTNCCTATT TATAATAAAC TACAGAAGGT AGATTTCAAA GGTAAATGGCT
GTTATGGAAA CCTACTGAG GTGTCTGCT AAAACCACT CAGTGTGCAA AGCGAAATAC AATTNCTACT TCAATAGCTC
CTCACTGCT ATCTGTCTGT AGATTTTATT TCAGTAAAC TGTTACTAT TTCATGATGA GTAGCTAGAA TTAAAGCATT
AAGTAGCTTG AGAAAATAAT CTATATAAAT CTTTATATCC TACATATGGC TATAAAAATA AATTATAAT TTTAAAATT
GTTTTAAATA AACATTATT TTTACCTA CCAAAGTAAA GGTATACAG

SEQ ID NO:913: (Length of Sequence = 313 Nucleotides)

GTATCTGGTT GCCACATCCA AGAAGAACC GTGCNINTCG CTGGTCTTIN CTTTCTCTA TAAGGTGGTG CAGGTNTTTT
CCGAGTACTT CAAGGAGCTG GAGGAGGAGA GCATCCGGGA CAACTTINTT ATCATCTACG AGCTGCTGGA CGAGCTCATG
GACTTCGGCT ACCCCAGAC CACCGACAGC AAGATCCTGC AGGAGTACAT CACTCAGGAA GGCCACAAGC TGGAAACAGG
GGCCCCGGG CCACCAGCCA CGGTNACCAA CGCGGTGTCC TGGNGTNCG AAGGCATCAA GTATCGGAAG AAT

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CCAGGATGCT GTGTGTAGGC GTGGGAATNT GTGCTTGGGG CAGACTTAAA CGCCATTGGA CAAATAGGAC ACTTGTAGAA
GACTTCACAG TGAGAACCTT GAATNTAAGA CTTGAGAGCA GCCACATCAG AGTACACAAC CATTGCAAAT GCACCACATC
GAAAACCAAC TCTCCTCGTG TAGINCAGAC AGTTCTTTGT GGGGTGGGGT CTNGGAAGGT G

SEQ ID NO:902: (Length of Sequence = 331 Nucleotides)

GGTGGCCAGT GATCTCCTTT CTTATCACCT ATAGACAGCT TGCCACAGG AAAAAAGAAA GCCAAACACA GACAAGCAGT
ATGAGATACA ATGAGCGCCC TTGGGCCATT AAAATATGAT TGTGTGCCA AGGTGCGCTG GNCIGCAAAC AGCTCTCCAG
AACCTGCAGC CAGCACAGAC CAAAGTCAGG TTTGINTCCT CTTCTGTGTA TGAACAAAGG TTGATTCCAT ATGTGGCTA
TTGTGAATAG TGGCAGTAAA CATGGCAGTA TTGTATGAAA ATATNACAGA TTAGNCCCTT TAAATATGTG CACTATGGNT
GATCTATCAA A

SEQ ID NO:903: (Length of Sequence = 389 Nucleotides)

AGCAATACTA AACATAAATG TAAATTGGGC TAAATGCTCC CAATTAAAG ACACAGAGTG GCAAGCTAGA TAAGGAACCA
AGAGCCATTG GTATGCTGTC TTCAAGAGAC TCATCTCACA TGCAATGACA CACATAGACT CAAAATAATG AGATGGAGGA
ACATTTACCA AGCAAATAGA NAACAACAAA AATATTTCT AATAGATTTC TGTCTTTAAT AATGAAATAT GTCAAACCTC
TATAAAACT ATATGTAGGA AATATAAANG TTTATATATA ATTCATGTAA TGTNTAATAG TAACTGAATA GCTAGTATG
AATAACCAAG CTTCCTTTTG TTGTTTIGNA CATTGGNGNA ATTGAACATG CTTAAAGGTA TTGGGAAGG

SEQ ID NO:904: (Length of Sequence = 285 Nucleotides)

AAATCAAGGA CCGTTAGAT AGATGATGGG CTAGGCAGGT GGGGAAGAC AGAGCTCACT GCGCTNTGGG GTCTCTGTGG
GGCCAGCCCC TNATGCCCAT GTGGCCACTN ATGCCAGCT TCCCCAACA CCCCANCACA GGCCAGGTC AATATTACAA
AAGTGAACAA ATGCAACCTG TTTCTGCTTT NACAAATGAC ATGTCTCCAT CCCCAGCCAG CAGGGGTAGG GGAGGNCGGT
TGAAAGTGNC ACTCCGGTA AAAAGGCAAC AACTTTTATA AATG

SEQ ID NO:905: (Length of Sequence = 374 Nucleotides)

GAAGCAAAA GTTGAACCTT TTAAAGTGCT GAACACAAAT CCAAATCGA ATGGTTCAAG CAGCOGTGAA ATCGCTCTTC
ATAAAGTGGG CTTAATCTC TAGTTAAGT TCTTTTGATG GAATGAATTA ATTAATGTGT CAGGTGGCTT ATTGTGGAT
GCCATGATTG ATGATGTICA TTTTAAGCTC TTACCTATAG TACAAGTACA TGATGCTACT GAATATTTTT TCCACTTGA
AACTGTGAGC TGGGTTGTG CATTAACA CACATACANA CANAATCANN AAACACTGCG GACTTTTCAC TCAAGCTGGG
TCTTTCTTC CCCAGTGGTA AGGGCAAATC CTGSCCTANC TAACCAACAC CCAC

SEQ ID NO:906: (Length of Sequence = 375 Nucleotides)

CTGACTGAAA GGCCTTTCC AGCTCCAACA CATGAAGGT CCATAATTTT CCCCAAATGT CTGCGCTCT GAAACTTCA
ACTATCTTAA TATTGTGAC ATTTATGCCT GTGTATGGCA ATCTGATGT AAAAGGAGCC ATATGTAAAT AATAACTGAA
ACTTGTCAA AATAATGTTA AGGAAACATA ATTAGCAAAG CAATATATAA TTNCAAGTCC ACTGATTTAG AGAATCAGAA
GTACANTTA GAATCAGAAA TAACAACAT CTGGCAGGGA TGGAATAATG AGAGCAGATA TAAAGGTGT ACCCAACCC
CTGACCCAC TGCCATTG GGTGTGCACT ATGINTTCC AATATTAATA TCTTT

SEQ ID NO:907: (Length of Sequence = 390 Nucleotides)

GTGCTGACTT CAGCAGCCCT CTGAAAGGCC CCTTCCATAA GCTGGGAAG TATGATCATG GTTCATCAT CTTGTGTGGT
TATTACTTCA AGGTGACCA ATCTGAAAGC TCTGTGTGAA GAAGGGGACT GAGTGGCTGT GAATGATGAG ACCGTGTGTT
AAAAGCCAGG CTTAGCCTGA GGTCCGGAAG AAGCAACCTC AATGCTGTGC TTTACCATAG CACCACCTGC AGGTATCCAG

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ATGTATTAGA ATCCCTTTT ATAAAGGATA AAGGTGAGGG TCAGAGAGAC TAGGAAGCCT GTNCAGGGTG ACACAATACA
AAGTGTGATA AATGGGTTT GACTCAGCC ACTCTGCTTA TTAACATCAG CAGTATGGTT AATGGGGTGA CCG

SEQ ID NO:895: (Length of Sequence = 304 Nucleotides)

GGTCTAGATT CAGTTATGAA TGTAGGCATT AGTTAAAATT AACAGATGC AGAGTATTAA TTCTTTAAGA CAACAAGTG
ATTTCTGTAA GTTTGAGCCC TATGTGGAAA GCATTGTGGA ATCTTAACCT TTTGTACAC ACTCTGTGG GACGTATCAT
ATAAATGTCA GACTAAGTA ATGCTTGTT TGTGGCTGAA TATTTTNCGT AGATGTTTTT GAAGTTGACA TGACTTACGT
GCATTTAAAT ATATATTGCC ATCCCTTAGT TTGTAATTAA GGATTNGGA ATATGGGTTG TGGG

SEQ ID NO:896: (Length of Sequence = 337 Nucleotides)

GCAAAGTATT TCATCATATG CATGTACTGT ACCTTATTTA GCCAGCCCCA TTTTGTITGG CTGTGGGAGA ATTACAATAG
CTGTTTGTAC TGTGTATCA CATGCCAGGC ACTGTACTGT GTATTATCTC ATGTAATTCT CATAGTTACT GCATGGTGTA
GGTATTTTNA TCCCCAGTTT ACAGGTAGAG AAAGTGAACC CAGAGATGTT AAATAATTG CCCAAGTTTT TTGGCTGATT
ATACTGATGA AGATACTGAT ACTAGCATTG TGTGTGTCAGT TATTTGCCAG ACAGAACTCT TTATTTTTTA ATACATAATA
TCCATTTACT CTTGAGG

SEQ ID NO:897: (Length of Sequence = 316 Nucleotides)

NATCACTTNA GGTCAAGAGT TCNAAACCAG CTTGGCCAAC ATGGCAAAAC CCCGINTCTA CTAAAATAC AAAANTNAGC
CAGGTGTGGT GGTATGTGCC TGTAATTCCA GCTACTCAGG AGGCTGAGGC AGGAGANTCA CTTGAACAGG GAGGTGGAGG
TCGCAGTGAG CCGAGGTTGC AGTGAGCCGA GATTGCACCA CTGCACTCCA GCGTGGGCGA CTNAGCGAGA CCCTGCCTCA
AATAAAGAAA TAAATAANTA AAGTGGGGAA GTTAGTGGTT TCTGGTGTAT TCAGAGTTGT GTACCCATCA CCCTGG

SEQ ID NO:898: (Length of Sequence = 200 Nucleotides)

GAGATCTGGG GCTGGGTAT GGATGATGCG GGAAGGGCG GTCGCTCTG CCACTGTCAG GGACCAGCCG GCCAACGCCC
ACCGNAAAG GTGTCTAAA ANTINAGCTT TTCACCCACC TGCCCTTTC TTCAATCCC ACGCTGTTTC CTTTCAAAGT
TCTGGGAGGA CGAACTCACC GAGGCGAGAA GTNTAACATT

SEQ ID NO:899: (Length of Sequence = 264 Nucleotides)

CTCTGTAAGT TAGCGTTCAT GTTTTCAGCC CCATGCAAAG GCGCAANACN TCAGACAGCG TGGTTCININ AACATNAGTG
TGTGGTGCCCT CCCAGGAGCA GGGATTNAG CNAGGCTGCT GACACATAAA CACACCCCA CCTCCAGAAG CAGAGGAGAG
GAGCCAGGG CCAGGCGAGG TAGCTCAGCA AGGACCCAGC ATGCTNCAGG TGGGGCCAGT AAGAGTCACT TCTCCAGCNA
GGTTCAGAGA GGAGAGAGGC AAGA

SEQ ID NO:900: (Length of Sequence = 265 Nucleotides)

GCAAATGGTA AAAAACCAG TCAGCAGAAG AAATTAGAGG AGAGACCAGT TAATAAATGT AGTGATCAAA TAAAGCTAAA
AATACCACT GACAAAAAGA ATAATGAAA TCGAGAGTCT GAAAAGAAAG GACAGAGAAC AAGTACATTT CAAATAAATG
GAAAAGATAA TAAACCNAA ATATATTTGA NAGGTGAATG CTGAAAGAA ATTTCTGAGA GTAGAGTAGT AAGTGGAAT
GTTGAACCA AGGTTAATAA TATAA

SEQ ID NO:901: (Length of Sequence = 381 Nucleotides)

CTTCTGTGCA TATAAAGAG AACAGTCTGG NCACTTGAAA ACAGACACCT TCTGGTTTTT AATGTGTTGG TCAAAGTGGC
GATACAGCAA GGTTCGAGG GTGAACACAG TGTCGCACAT GGAACACTTA TATATNATTT TNGGTTCTCC TATCTTGATG

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ATCTTGCATG ATTAATACTA TTGGCCTGIN CCCTTTATCC TCAGCTGGIT GTACAATTCT TGAATGCTTT CTCTTCCCC
 TGAGGATGCT ATAGATATTG TOCTACTGIN ATCTGAAATN AGTCGTTTTC GAGAAGTTTC TOCATCCAGA TACCTATAGA
 GTCTGCTTTT TTTTTTTTTT TTTTTTTTTT ATATGCAAAC NCTCGCTGTA TTATTCAGGC TGATCTGAAT CTCTGGNCT
 TTAGTGTTGT GACAGCTTG GCTCTTAAA ACTGCAGNT TACAGGCATG AGCCACAGTG CCTGGCCATC AAGTAGCA

SEQ ID NO:889: (Length of Sequence = 349 Nucleotides)

ACAGAAATCT ACGTAGACTT CTNCCAAATG CCACATGAGA GCAGTGGCAG AATACAGAGA GACCGGCGAC CACAGCAAGG
 AACTGTAAAG GCCAACAGTC CTCAGGCATG CAGGCCTGGG CCAACAGCAC AACGCAGAGT CGCTTCTTCT CAGTCCAGCA
 ATTAAAATGA CCATGGCAGC CAGGGTTTCA TTAGGTTACT TTCAAAAACC ACCTTTGCTG GAAAAAATGT TTGGTAGTTT
 AATCTGCATA TACGGACAGT CATGCACCAC ATAATGATGT TTAGGTCAAC GATGGACCAC ATATTCAATG GGTAGTCCCC
 TAAGGTTTAT AACCAGCATA TTTTTTACT

SEQ ID NO:890: (Length of Sequence = 341 Nucleotides)

GINGTAGGGG TTCTAGGTGA GGGCTAGTAG GTAGGGTTAG TAGGTAGGC TAGTAGTAGG GGCTAGTAGG TAGGGTTCTG
 AGGTAGGGTT CGTAGGTAGG GTTAGTAGGT AGGGTTCTGA GGTAGGGTTA GTAGGTAGGG TTCTAGGTGA GGGCTAGTAG
 GTAGGGCTAG TAGGTAGGC TAGTAGGTAG GGTAGTAGT TAGNGTAGT AGGTAGGGCT AGTAGGTAGG GCTAGTAGGT
 AGGGTTCTGA GGTAGGTTC GTAGGTAGGG TTAGTAGGC GTCTNCTCTT CTCCACCCT GGNINCTTGT AAAAACTTAT
 TTTACAAGCA ATAGGAATTT G

SEQ ID NO:891: (Length of Sequence = 344 Nucleotides)

GACCTGGCTG CGCACCAGGA CGCCTGGAG CAGATGCGG CCAITGGCCA GGAGCTCAAC GAGCTGGATT ACTACGACTC
 CCACAAATGTC AACACCCGGT GCCAGAAGAT CTGTGACCAG TGGGACGCCC TGGGCTCTCT GACACATAGT CGCAGGGAAG
 CCTGGAGAA AACAGAGAAG CAGCTGGAGG CCATGACCA GCTGCACCTG GAATAGGCCA AGGCGCGGGC CCCCTTCAAC
 AACTGGATGG AGAGCGCCAT NGAGGACCTC CAGGACATGT TCATGTCOA TACCATCGAG GAGATTGAGG GCCTGATTCT
 CAGCCCATGA CCAGTTCAAG TCCA

SEQ ID NO:892: (Length of Sequence = 367 Nucleotides)

CTGGGCAACA TGGTGAACCC CATCTCTGCT AAAATACAAA AATTAGCTGG GTGTGGTAGT GCCTGCCTGT AATCCCAGCT
 ACTGGGAGG CTGAGGCAGG AGAATTGCTT GAACCTAGGA GGTGAGGTGG AGGTGCACT GAGCCAAGAT AAAAAGAGTG
 AGACTCCGTC AAAAAAAAAA AAAAAAAAAA TATATATATA TATATATATA TATATTNGN CTCCAATCCC ATCTAGGTG
 CTGCAAATGC CATTATTTCA TTCTTCTTGA TGGCTGAGTA GTTTTCCACT GTGTATGTAT ACCACAGTTT ATCTTCTTGT
 TGATTGATGG GCGTTTGGG TGGTTCCACA TTGTGCCAG TTGCAA

SEQ ID NO:893: (Length of Sequence = 220 Nucleotides)

GCAAAATATT TATTCCAAGT TAGTTATTTT ATGCAGTAGT TTCCCCCTOG AGACTTGIGA TAACCACATC TTTTAAATCT
 GTAAATAATG TTATCAAAAT AATCTTAATC TTGAAATCT CACAAAAT TATATTTTAC AATCCACCCT GAATATCAAG
 GCTGCAAGAN TAACACAACA TTTCCTATAT CCAATATTTT TACAGCTGTA CCCAAAAGG

SEQ ID NO:894: (Length of Sequence = 313 Nucleotides)

GGGATTGGGA TTGTITGGCT CTGAGGCTGT TAAGTCTGGA CTGATGCTGG AACTAATAT CAATGTTTAA CAGGGTTGAC
 TGTCATTAAT GATGTGCTTA GCTGTGGGTA CAGATGCTTT GCACATTAAT ACCCTCTATT CTCACAATCT TCCATGGGGG

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TGCCATTAGC AACACTGTTC AGATGAGATA ATTAAGAAAA AAAGCCAATT GAATGATTGA GTGAATGANT GATTGAAAAT
 CTTTCCGAAG TTATAATAAT AATTGTGATT ATTGGGGTCA AAGCAAAACC ATTTTAGTCT AAAAGATTGT AACTATATACC
 AACTTTTACC CAATTGTGAA TGAAAAATTA CATTTCCAAA CCATGTAGAA ATTCTGANCT CTTTGAAATA TTCTCTTTTG
 TGGGAAAGAA CCAGAAATTC TTTGTATAT GTACCCATTT ATCTTATTIN AGTTACCCAA CCAAAAGATA AAATAATATT
 CTCAAAGAGA TAATTGACTG GAGGAGTTA AAGTGTTTAT AAATATTAG

SEQ ID NO:883: (Length of Sequence = 369 Nucleotides)

CTGCCATAAG AATATCAGCC TGGGGGCAGT CCAGACGCAG CCCTTGTGCA TCCTTTCTGT TTGCCTAGTC TCAGCAGACT
 GTGATCACAA GGCATTGTCT GTGGGATTTT NCCTTTCCCT TTCTGTATCT CTCTGTGGT TCTAGGTTGT TTGGTTGTTT
 ATTGTTATGG TGGCTTTTNA TTTTAACGCC CCTTGAGCCC CATGATGGCT GGTGTACCC TGTTCTTTTA CACTGTTGGG
 CCAGGTGCTG CTGTCTCTTC TTAGGGCATC ATCAATGCA AATATTTCTT TTTGCTCCCT TTATGAAGAT GTCTTATAC
 CCTTGCTTTT CCATATTTT TNTGGGCCAA GCAATGCCAT CTNCTTTTA

SEQ ID NO:884: (Length of Sequence = 327 Nucleotides)

AGTTCATCTT TTTCCAGAGG GGTCTGGGTG CCTTTAAAGG GGTGCAGGCC GAAGAAGATG GTGGCTTGGG GAAACTGGAG
 CTGAAC TTGG ATTACAGAACT CTGAGGCACC GGGATGGGA TGGGAATAGG GACTGGCACA GGCAAGGGGA CGATTACAGG
 ATACGGCACC AAGAGGGTGG CTGGTGGGAC CAGGGGGGAC AAGGGGGAGC TAAAGGCTG TGGGGGCACA GGGGCATAGC
 CAGGAGGAGG CTGACAGGGT GGGGGCCGA GAGTGCCTG GGAGGGAAAC AAATTCTTGA GCACAGCTTC AAATGGCAAA
 GTGGGCT

SEQ ID NO:885: (Length of Sequence = 380 Nucleotides)

CCAAAGCTT ATCCACCATG ATCAAGTGGG CTTATCCCT GGGATGCAAG GCTGGTTCAT TATATGCAAA TCAATAAATG
 TAATCCAGCA TATAACAGA ACCAAAGACA AAAACCACAT GATTATCTCA CTAGATGCAG AAAAGGCCTT TGACAAAATT
 CAACAACCCT TCATGCTAAA AACTCTCAAT AAATTAGGTA TTGATGGGAT GTATCTCAA ATAATAAGAN CTATCTATGA
 CAAACCCACA GCCAATATCA TACTGAATGG GCAAAACTG GAAGCATTC CTTTGAAAAC TGGCACAAGG ACAGGGATGC
 CCTCTCTAC CACTCCTATT CAACATAGGT GTTGGGAAG TTCTGGGCCA GGGGCAATTT

SEQ ID NO:886: (Length of Sequence = 400 Nucleotides)

GGGATGACTT TAAACGAGAG CTGGACGTA TTACTCCAGA AGTCTTCTCT GGGTGGAAAG GAATGAGTGT TTCANACTTA
 GCTGACAAGC TCTCTACTGA TGATCTGAAC TCCCTCATTG CTCATGCACA TCGTCTATT GATCAGCTGA ACAGAGAGCT
 GGCAGAACAG AAGGCCACCG AAAAGCAGCA CATCACGTTA GCCTTGGAGA AACAAAAGCT GGAAGAAAAG CGGGCATTTG
 ACTCTGCAAT AGCAAAAGCA TTAGAATATC ACAGAAGTGA AATACAGGCT GAACAGGACA GAAAGATAGA AGAAGTCAGA
 GATGCCATGG GAAAATGGAA ATGAGGAACC CAGCTTCGCC GACAGNAGGC TTGCCACAC TGATTCACCT TCGGAGATGT

SEQ ID NO:887: (Length of Sequence = 363 Nucleotides)

TAAAATAAAT GCTCTGGATG GGAGAAATGT GGAAGTTACT TTGGAAC TGG ATAATAAGTA AAGGCTGAAA GAGTACTGAT
 ATACATGCTA AATAAAACCA ATATTTCCCT GAATGANCTA TTCAAAGCAA TTCTGGTGGG TGTTAGACAG GACATAGAGA
 CCTGGAGAAG AAGCTCCCAT TTTCATAAAG AACACAAACA ATCATGTATA GAATGTTGGT AGAAATATGA ATGGTGAAGG
 TCAATGTAAT GAAGTCTTAG ATGGGAATAA GANAGGTTAT TAGACAAGG AGAAAAGGTA ATCTTGTGTA TAAAGTGGCA
 AAGGAAC TTG GCCTGAATTG TATTCATGTN CTAGTGCTTT CCT

SEQ ID NO:888: (Length of Sequence = 318 Nucleotides)

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CCAGATTTCC ATGTGTGCAG TATTATAAGT TATCATGGAA CTATATGGTG GACGCAGACC TTGAGAACAA CCTAAATTAT
GGGGAGA

SEQ ID NO:877: (Length of Sequence = 404 Nucleotides)

ATTTGGCTCC TGAATGTTGC AGAAACTGG TTTTGTACAC TGGGGAAGGA GAGAGTGAAG ACCCTCCAGT TGGTTCCTCA
GTCAGCTCCG TTCTTGGTGT CGCTTTCTTG CAATTTTTTT CCTCCCCTGG CCCCTCCTGT GAGGGTTAAA AGGGCCATCT
CCAAGCCAGG TGGAGCCCCA ATCCCAATTGA CCAAGAGGGC AAGGTATGGG GTCACCTTCT CATGGAAGCC CTCTTCCTAA
AGGAGCCCAA AGGGGACACC TGCAGAGGSC GGGCTGTGAT CTGTGTGTGA ACTTCAACAA AATCTCAGGT TAGTATTTCT
CCAATTTTCA TTGAACCACG ATGTGGTATA CACTACAAAA TGCAGATTCT GGTGCCCTC TCCAAGAGTC GGCCTCAGTT
AAAA

SEQ ID NO:878: (Length of Sequence = 340 Nucleotides)

TGTACCGCTG TGCTGTTGGC ACGAACACCT TCAGGGACTG GAGCTGCTTT TATCCTTGGA AGAGTATTCC CAGTTGAAGC
TGAAAAGTAC AGCACAGTGC AGCTTTGGTT CATATTCAGT CATCTCAGGA GAACTTCAGA AGAGCTTGAG TAGGCCAAAT
NTTGAAGTTA AGTTTTCCAA TAATGTGACT TCTTAAAAAG TTTATTAAG GGGAGGGGCA AATATTGGCA ATTAGTTGGC
AGTGGCCTGT TACGGTTGGG ATTGGTGGG TGGGTTTAGG TAATGTTTA GTTTATGNTT NGCAGATAAA CTCATGCCAG
AGAACTTTAA AGTCTTAGGA

SEQ ID NO:879: (Length of Sequence = 372 Nucleotides)

GAAAAGATAA TGAAGGAATA ATGCAAAGCT GAAGGCTGTG CCAGATGTAA GAAGTGATTA TGAAGGATAA AAGAAAAGGG
CTTTCCAAGC AGGGAAGAGG CATCAGAGAG AAAACCAATT GTTGAAGCCAG TATTCTGTCA CAGGGACATT TGCTTTTNC
CTTTAATGCC CAGTAAGGTT CTTCTCAGGT TCCATTAAAC ATGCAGAATC ACAAGACCCC CCCAAAGTTA CCATGGTGCC
AACCGACTCA AAACAATACA GACAAGAAGC TCAGCTCATC AGGAAGGCTG CAGCAGGCAT ATGGGAACCA TCTTGCTCCA
CAAAGGACAG CTNAGATGGC AAAGATCCCT ACAAGGGTCC ATATCCACGG GG

SEQ ID NO:880: (Length of Sequence = 405 Nucleotides)

GAGCTAGGCA CCAGGCATTG TGTGAGGCC CAGGAGTTTA AGAAATGAAT TAAATATTCT CCCCTGCCCT CTTTGAAGCTG
ACTCTAACGA GGAGACTTAA GANTTATTTT GTAATCTCTA GTTATATTIN CTGAATTTCA GAGCTTAAAT ATTATACTTC
AACATGAGTC ACACCTTTAT TTATATGTTG GTTTGTCTCA GCTGTGTTGT GGGTTGGTGG AAGGAGACCA CACATACATA
CACACAGAGT ACATACATGC TGTGTATGTT ACACACATAC TCACACCCCA CAAAGTGAAG CTCCATGCTC ATTTTGTTTA
ACAAAGACTA GAGAGGCCTT GCAGACAACA GCTACCTGGA GCAGGAACAA GTGAAGCATG TTTCTGAACC ATTTCTCAAG
TCACA

SEQ ID NO:881: (Length of Sequence = 336 Nucleotides)

GTCTTINCAG TCAAAAGTCC TTGAAGCTGG GACCCTTTGA AAGTCTGTCA GTTACATGTT GTTGGTAGTG GCTTGTTTTG
ACCGTTTCAA AAAAGGAAGA AAAAACCCTT TAAATCATTT TTCTTTCTC TTTTCTACTG CAAAGGCCGA CGAGATTGAA
ATGATCATGA CGGACCTTGA AAGGGCAAAC CAGAGGGCAG AGGTGGCTCA GAGAGAGGCG GAGACCTTAA GGGAACAGCT
CTCATGGGCC AATCACTCCC TCCAGCTGGC CTCACAGATC CAGAAAGGCA CCAGACGTGG AGCAGGCCAT AGAGGTGCTG
ACCGCTCCA GCCTAG

SEQ ID NO:882: (Length of Sequence = 369 Nucleotides)

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CAGCTTTGCA AATCAAATAG AATTCAATTTT GCCTCCNCIN ATCTTACAAC TATTCTCTGG AGTAGGCAGG CTGGTTGAAC
 TTCAAGAGAA GAGGCGTTCC TGAGAGCCTC CTGGGTGAGC TTGCACACCT GGGGGCCAGA TGINCTTTGC CCTCCTTGCA
 AAGCCTCTCT AGTCTGGTGC CCAGAGAATA CAGCTTCAGC AGCAGCTCAC TTTGCTTTTN AGTTTAGATG AGAAAAACA
 GCAAATAGT CCATCAAGGA CAAATTCCTG CCAATGGATT TNCPTTTGCA AGGANGTTCA CCTTTGNCC TCAAGCATCA
 TCTTAAAGTT GTGAATGCCT GATGGGAGGT CCAGGTGNN CTGTGGGAGG AGCTNGGGGT GGNITCCAAA ACCACCTGGG
 GACCAGTGG

SEQ ID NO:871: (Length of Sequence = 290 Nucleotides)

TCTTTGCATT GATAGATTAG TTATTTATGC CAGINGICTC TGCTGGCTT GTTTTGGTTT TNATTGCATT TGTITGCTAG
 AGATTGTTTT TAGTTTTNCA ATTTCTTTCT CTGTACACCT GCCCTCCCC CACCCACCA CTGGGTACT ACCTCCTTTT
 TGGCACTACA TGATGCCTTA AGCCAGGNT TGCCTAAGCT TTCATAACAG ATCCCAGCAC TGCTCATCCC CAGTGGTGGA
 GGINCTAAT GGGATAACCT GATAGTGTGG GAAGGCTGGC TGGGGTTGT

SEQ ID NO:872: (Length of Sequence = 313 Nucleotides)

AAAACAAAAC AAATTTAAAA GCACTCAAAA ATAACCTCAA AAAGAGACTA GTGAGTGTCC CTTAAGGAAA GCCCTTCCTG
 CAGATTCCCA CAGAAGTCGG CCCAGGCACT TAACCTCCAT CTCAGCTCTG GTACAGCTCA CTGCGTACAG TGTTACCAA
 ACTCTTATGC CTGNGCTGCT GATAAATTCT ATTTATCTCT GAACCTCAAT TTATTCAAAT CTAGTTATGA TATATCATAG
 TGCTTGTAAAT TGTGTAAAA TATAGANGTA ACATACAGCA TGTTCTTACA CGNTTAATAA ACTGGTGCTA ATT

SEQ ID NO:873: (Length of Sequence = 300 Nucleotides)

TAGTAAACAA GTATTACTTC AACTGATACA ATGGCTACAT GACATCAAAG TACTATAAAT NATCAAAACT ATCGTACAGA
 AAAATTACAA ATTCGTTGCA AAATACATTA TACTGCTACC ATTAAGAAAA AAGTGCITTT NGTTTTCCTT TCTTTCTTTT
 TTTTTTTTTT TTTTGCCAGA AAAGTATTCT TNCATATAG AAAATCCTAC ATGTTACCTT GCATGTGGCT AGENTATATC
 ATAACGGAGT TGTACTGAG TCCTTCGAT TTGCTGGATG AAGGGCTGAA AAATATATTA

SEQ ID NO:874: (Length of Sequence = 364 Nucleotides)

GAGTCATTGA TGCTGAGAGA TTGTAAGAA TATACTGACA GCATCCTTGT AGCTGCATCA CAGTAAATCG GACTTCTGAA
 TCAAGCAGCC CAGCCTAGCA GCTGATAAGA GTGAATGTAG GTGAGAAGCA TTACCTTATT CCTGTAACAA GAGAAGTGT
 TTGTGATAAG TGAAACTAGG AATGTAGAAG AAGAAATATC CTATGGCTAT TATAAAGAN GAAGGACTTG CCTGANTGAC
 TGGTGGTGC ACCAGAAAAT AACTTTCAGA AGAATGCTTT CTGTTAAGCT GCTGCATTGT TCCTGGAGGA AATGTTATTT
 CTAATGCATG TTATTTCTTC AAAAGATAGG ATAACAAAGA ATTG

SEQ ID NO:875: (Length of Sequence = 341 Nucleotides)

ATCAGTCCAA TGCAGATTAG TATCACTTTG CTCATAAAG AGAGTATAAA GGTTCTTGAA GTTTTTGAAA GGAGCGGCTN
 AGCTGACTGT TAAGGAAGCT ATCTTTTGTG TACAAGAAAT TTATACITTT CCTTCTAAA TTTCACAAAC AGAATATTAT
 TAGAGACAAC AGAATACATT TACAAAAATG GCATCAGAAA TAATTGANTA CATTGTGTAC AATATCINCT ATTAATGAAA
 TAAATGTATA TTTNATATGA TATTTGGTCT TTATGGGAAA ANTAATATAA TINCCAATAT TCTAAGGNTG ANCAAAGNNG
 GTTTACAAAT AGCATGCAAG G

SEQ ID NO:876: (Length of Sequence = 327 Nucleotides)

GTTTCANCTT GTGGGTCAAC TTCTAATATT TGATGGTGGC TACACTGTGA CAAGAAAGGT TTTNAGCTT GTTGGGGTCA
 GTGGATGGG ACAAGGGCAC CCAGTGGTGG TGCCCGGNCC AGGGAGGAGA ATACATTGTA GAATATAAGG TTTGGAAGTC
 AAATTATAGT AGAATGTGTA TCTAAATAGT GACTGCTTTG CCATTTTCAAT CAAACCTGAC AAGTCTATCT CTAAGAGCCG

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TTAACCCTG AAGTNGTCTT TAAGGACAAA ACTTAAATTT TAAATGGGT GTTACCATAT TTATGAGTG GACTGACTCC
AAGGTTCCT TGCTCCAAGN NTGGGCATCG TGACATTGCC GTGATGCCA GAGG

SEQ ID NO:864: (Length of Sequence = 223 Nucleotides)

AAGGGGATAG AGCAGACACT CCGCAGGTNT CTTGAGATTA TCATCOGCTG AGGGTAGAGC TGAGGGTGGA AGGGGAGTNA
GCAGACACTC GGAAGGTGTC TTNAGGCTCA GGGAGTTATC AATTATAGAA TGTGTGAG TTGGAGGAGG TGGCTGGTGG
CCCATCCTGT TTTTAAAGT TTCANCTGTG AGGTAGGGCC AGTAGGGCAA TCCTGAAGAA TGG

SEQ ID NO:865: (Length of Sequence = 228 Nucleotides)

GAACCGGGA GGCAGAGGTT GCAGTGAGCA GAGATCACAC CACTGCACTC CAGCCTGGGC AACANAGCAA GACTCCGTCT
CANAATTTIN CCAAATCTG ACGAAAGAA AAGAAACAAA TGGTTCAGAT GGGACGGAGG GTGGGGGAGG GGGGGAGGGT
GAGTAGGAAC CAGGAGGGCT GCCTGGGGTG GGGGAATAAN TTAAAAAAG GAACGAGTTA ACAACAGC

SEQ ID NO:866: (Length of Sequence = 328 Nucleotides)

GCACCACGTC AGAGAGGCC CAGGCCACTG AGCCCGGGAG GAGACCCAGC CGGCCAGCCA GATGTGTGCC TGANTGCCAC
AGACTTCAAG CAGTTTACAA ACGAAACTCA CTGTTAAAG CTGTTAAATC TCATTAAAC AGTAGACGAG TGCTTTAGAT
TCTCTGAATA TCAAATAATA TATACAGATA GACTGAGA CATGACAGTC TAATCTAAG CATCTTACA GATGCATTIN
CTTGAAAGT TAGTCTCTT TTTAACTCTG AATCAGTGAT AAAATTGTTA ATTTGCAAAA GAGTACAGTT TTAAGCAAGA
NTAGAGTG

SEQ ID NO:867: (Length of Sequence = 361 Nucleotides)

GTTTCATGGC ATGTAATAAT TATGTGAAAT TCAAATTTTA GTGTCCCGAG TTCTACTGGA ACGCAGCCCC TATGTGGTTC
ATGINTTGGC TCCAGCTCCT TTCACACTGC AGCAAAGCAG GGAGTGTAAC GTACACCCCA CGGCCAGGG GCCTAAATA
TTTCCATCA GACCCCTAGA GAAAAATATG CCGACCTCGG ATGTGACTGA GGGTGGGGAC TTGGGTGAAT GCGGCCAGG
AGTGACATCA AGGGTTTGAA GCAGACCTC TGTCCAGGAG GGAGCGGAGG CAGAGCAGGG ACAGTAGTNA GGAGGCCATC
TGTGGTGACT TAGGCAAGGT GAGGAGGATG TAGGAGGCAA G

SEQ ID NO:868: (Length of Sequence = 364 Nucleotides)

AAAGCAGCCT TCAGGCTACT CTCCTTGGN TCCTTGCTCT GGGGAAGAAC ACTCAAGCAG CTTTAGAAAA AGTCCACGTG
GCAAGGAATT GTGGTCTTTT GCCAACAGCC ATGTGAGTNA TCCATCTTAA GAGTGGNTCC TCCAGCCCCA GTAAAGTGT
CAATGACAG CAGCCCTGGC TAACATATG ACTGCAACTT CATCAGGGAA CTTGAGCCAG AAAAATCAG CTAACCTGCT
CCTAACTTC TGACCCACAG AAATGGTGAG ATAATGAATG CTGTTTTTAA GCTGCTAAGN TCTGGAATAA TTTGTATTC
AGCAGTAGNA TAACTAATAC AANGCCACC AAGNATCATT TCCC

SEQ ID NO:869: (Length of Sequence = 383 Nucleotides)

AGCGACAGAC AAGTGAGCAT CACTACCAGA GCTCTGCCTC CTGTGAGATC AGTAGCGACT TTAGATTGTC ATAGGACCAT
GAACCTGTG CATGCGAGGG ATGTGGGTG CACACTCCTT ATGAGAATCT AATGCCTGAT GATCTGAGGT GGAACAGTTT
CATCCTGAAG CCATCCCTGT GCCCCTACCT GTGGAAAAAT TGTATTCCAT GAAACAGTT TTTGGGGCCA AAAAGATTGA
GGACCGCTGC TCTATAAGAA ACTATTACTG AAATAAGGTA TAAAGTCTTT ATCTTACTTA TATTTATATC CTCTATGGTG
TCCACACACA AGGTGCTTTT TACACTTAAG TTGTAAACT AAAATATTNC TTAAACTTT AAT

SEQ ID NO:870: (Length of Sequence = 409 Nucleotides)

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AAAAACAATT AGTAAAAAATT ATGCATTAAAG GAATTATTTA CTAGACTTTTC TGGAAGTAAA AAATAAGTCA GCTGGTTTTTC
 CCTTTGANTT CCTATATATT AAGGCAGAAT TCTCTATACT GTCCACCAAA ATCATAGTTA CAACTGTTTA CTTGAAATGA
 TTTATATACT GCATFGACCT GGCATGTTAA TATTTCCTTA TAAATATCAC CACTTATCCC CATGCCCTAA AGCAGTTTTT
 TTAAACCCAT TCTTTCTTGG AGAATAATTA TAATACCTTA AATACAGAAC TTTGGGTTTC TGATCTTGCC ATAGCCATGT
 AGCACAGCCA CTGA

SEQ ID NO:858: (Length of Sequence = 301 Nucleotides)

GGAGAAACGC CTAATGTAGA TGATGGGTG ATGGGTGCAG CAAACCACCA TGGCACGTGT ATACCTATGT AACAAACCTG
 CAGCCTCTGC ACATGTATCC CAGAACTTAA AGCATAATAA TAAAAAANTA AGAAAATGGA AATTGATTTT AAAAATTTTT
 ACAATGTGCA TCAAAAGACA ACATTAAGAA AATTAACAGA NTGGAAGAAA ACATTTGCAA ATAATTTATC TGATGAGGGT
 TTAATATCCA GAAAATATAA AGANCTCCTA CANCTCAACA GCAANAAAAG ACAACCCNAC T

SEQ ID NO:859: (Length of Sequence = 332 Nucleotides)

TGTCCTCACC CATAGAGCTA TCAGAGGGTG CCTGCNATTG GCAGACCCCT TACATTTCCC TTTAATAAAT CACTTCCCTG
 CCAAGATCTC TGTCAGGTT TGAGAAGTCA GAGCATTAA TATTTCNCAA TAAATGGTAT GTACATGANC ATCAGCAAGC
 TCCAAGAAAT GACTCGAGGG CCTTINACTA CTCAGAGAAT AAAGCAAAAA TGCCAGGTTT TCAGTGCTTG TCCTTTGTGC
 CAGGGATTG GACGTGTTTT TTGTTAAGIN CCAGCGTTGA GCTATGTTCC AGAAGATGGA GCCTTCAGA AATTAATTGT
 AGTGCTTGAA GG

SEQ ID NO:860: (Length of Sequence = 233 Nucleotides)

AAACGNTATG TGATTTTATC ATTACAACAG TAATTCAGAA ATATCTCANN TGTTACATTG ATGTCATCAN TATTACAAAA
 AAGGAAAAAA AAGTGACAGG CAACAGTGAA GAGCACCAGA GACCCAGCGC ACACCTAAAG TAGACCATGC TTCTTTCCCT
 CCACTGCCAG GTTATCGTCC CGGAAGCCC CCCACCCCT CGCTTCCTC CTCGCTTTC CCTAAAAAA NNG

SEQ ID NO:861: (Length of Sequence = 327 Nucleotides)

GGCAGGTGT CAGCGCCGT TTCACGCCA CGTCGGGAC ATGGTGATTT CAGAAAGTAT GGATATACTC TTCAGAATAA
 GAGGAGGCCT TGATTTGGCT TTTCAGCTAG CTACTCCTAA TGAAATTTTN CTCAAGAAGG CACTGAAACA TGNTTTGAGT
 GACCTGTCAA CTAAGCTGTC TTCAAACGCC CTTGTGTTCA GAATTTNCCA CAGTTCAGTG TATATATGGC CTAGCAGTGA
 CATAAACACC ATTCTGGAG AACTGACTGA TGCTCTGCT TGTAAGAACA TACTGCGCTT TATTCAATTT GAGCCAGAAG
 AAGATAT

SEQ ID NO:862: (Length of Sequence = 378 Nucleotides)

AATCAGGTCC ACATTGTGT CCTGGATGCT GAGTTTGCTG AGGGTTTCCA AGACCAGTCT CTGCGGGGAA AGGACGGCAT
 TGGGGCCAG GGTGGAAAAG GGTCTCTGGG CTTCANCTGA AGGGCAAACCT GCCAGTGTA GGAGTCCGTC CAGGACAGGC
 AGGCAATNC TCTCGGGTA TGGAGATAGG TCCAACCTGCC CCGAGATGTT GCGAGTGTA ACCAAGGTGT TTCCCGGAG
 CATCTCCAAG CAGTCCACC ACCACTCCAC TTTTTCGAG CTCACCCCT GGTCCGTT CCINCTCCTT TTCATAAGTT
 AGTGGTGCCT GCTTCCGGT TCTGGGTGCT TTGTGGGTGC AGCAAGGATC AAGCTTTG

SEQ ID NO:863: (Length of Sequence = 374 Nucleotides)

TCAAATTAAT GGTTTTATTT CCATCTGTAA CACTAGCAGA GGAGTCCAAA GCAGACTGAT ATCCATGGAT ATAGTTTAAA
 TGTAACAAAG AAAGAGTTGA ACTATGTACA TTGAAAAAG GAAAGACATT TTTCATACC AACCTTCCC TAGTTCGCAG
 TTTCTGAATA GTAGAAACAA AACACATTTT TAAATCTTTC TATCAATTTA ATTTAGGACG AAGTAACACA ACTTTTATAA

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ATGTCIGCCA ACTCAGGAGC AGGGCAGGAA TCAAACITTT TGGAGITGCT ATCAAGTINCT TGATTTTINCA ATCCCAACCG
 TCOGCAGAAC ACTAGATGTG TGNATGINTG CTGTGTGTGTG CATTTGTAGT AAAGAGGGGG TTGAGAAGTG GAAGGCAGAG
 NCAGGAGTNG GCATCTACCA NGGCATACAT NAAAGACCTT TACACCAACA CTGCCCTTCC CAGNAATGTG AGTGTATATCT
 GGTTCCTTAA AACCCCTGGGC TGCAGTCCAG ATAGTICATGG TTAGANCAGA TGGTTGAGGA AAGGTTCAAG GCAGTAGGAT

SEQ ID NO:851: (Length of Sequence = 170 Nucleotides)

CATCCAAGAT ACCAAGATAT ATGAGGGAAC ATTNNITTTA ATAAAAACA CAAAACCACA AATCCAAGAG GCTCAGNTAA
 CCCCAGTAA AATATATACT AAAATACAAG NAAAAGGGAA AAAATGCATG NACACACACA TATAGGCATA TCATATTCAA
 ACAGTTGTTA

SEQ ID NO:852: (Length of Sequence = 256 Nucleotides)

CAAAGTACAC ANGIGIATTT ATTACATTTT GCAAGCACTC TGTTCTACAT TTCAAAAACG CCACCNVCAA GCTGTGGCA
 CATTTATGTA CAAAACAGAT TAATGTATAT GCTGCTTACA AAGCACTCTG TGAAAATACA AACTCTAATA CCAGAAATAA
 AAGCCAAAAG TGTCACATC ATTACATAAG TNGAAAAGTC AGTTTNGAA ATTATCACA ACTGTTATGN CACGGAAGTG
 AAATACTATA ATATAG

SEQ ID NO:853: (Length of Sequence = 281 Nucleotides)

GTATGNGTTC TCTCTCTCT TGCTGCTTCT AGGATATTTN ATCCTTGACT TTAGGGAGTT TGATTATNAA ATGCCCTGAG
 GTGATATTTT TNGGGTTAAA TCGGCTTGGN GTTCTCTAAC ATTCTTATAC TTAGATATG ATATCTCCTT CTAGGTTTGG
 GAAGATCTCC GTTGCTATTC TTTTGAATAA GCTTCTTACC CCATCTCTTT CTTTATCTCC TCTTTACAGC AAATAAAGTT
 TTAGANTTGC CATTTINAGG CTATTTCTTA GACCTGTAG G

SEQ ID NO:854: (Length of Sequence = 255 Nucleotides)

TCTGTCCAGG ATTATTACCA GCTAAACCAN GTAATGGAGG TCTATGCCCTG ATGAAGAACA CCTGTAAAAG CTGGAAAATG
 TGGCTGTCTT CTCAAATGGG CAGATACCAG CACAANGATA CAAGGATTGT AAAGACTCAG AATCATGTTA CTTCAGAGG
 AAACTANATA AGNTCCAACA ATGAACACAA NATAATANAA CTNAAGGANA TTTGGANAAC ANTGCATAAA CAAAACAAGT
 TTAATGAATG ATTAG

SEQ ID NO:855: (Length of Sequence = 333 Nucleotides)

ATAGCTGTGG TGGTAACCCA CCAGAGTGAG CATGCTTINCT TCTNAGGATA GACGTTGGGT AGTGGGATTG GGGAGAGGCA
 GGACAGAGGC TTCCGTTGTG TCTCTCTAAT TCATTGTTTC TTAAAAAGGA TTGGGCTTA CAAGTTTCAA ATACTAAGAT
 TINATAAAGT CACATGGATT TTAAAAATC ACTCTATGTG ATGTTTGAAG CATTCATATA TTAAATAAA AGGATTGGTA
 TTATATATGT NCTTGAGTTG CTATAATGTT TTACGGTTTT CTTTGCTTC ACTTTTGAAT TNINCGAGGA TCTCCTGGGG
 GAAGNTTCAG TCG

SEQ ID NO:856: (Length of Sequence = 230 Nucleotides)

TTINAGACAA AGTCTTGCTC TGTCACCCAG GCTGGAGTGC AGTGGCGCAA TCTCGACTCA CTGCAACCTC CACCTNCTGG
 GTTCAAGCNA TTCTCCTGCC TCANCCACCC AAGTAGCTGG GACTACAGGC ACGTGGCACC ATGCCGACT AATTTTTTGT
 ATTTTTTTTA GTAAAGACGG GGTTCACCG TGTTAGCCAG GATGGTCTCG ATCTCCTGAC CTCATGATCT

SEQ ID NO:857: (Length of Sequence = 334 Nucleotides)

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CTCAGTAGCC TCCACTCCT GATTAGCTGG GACTACAGTG AATGTGTGCG CATGCCCAGC CTAGTGGTAT TTTTAACAGA
TAANTAAGAA TGGAGGTAGT GGCAGAGGTG GAGTGAGANG AGAGACANGT AAAATATAGG

SEQ ID NO:844: (Length of Sequence = 257 Nucleotides)

TTTCCCTCTC GTTGCCACAG CTGGAGTGCA ATGGCGINAT CTTAGCTCAC CACAACCTCT GCCTCCCAGG TTCAAGCAAT
TCTCTGCCT CANCECTCCG AGTAGCTGGG ATTACAGGCA TGINCCACCA CGCTGGCTA ATTTTNTATT TAAGTAGAGA
TGGGGTTTCT CCATGTGGT CAGTCTGGTC TCAAACTCCT GACCTCAGGT GATCTGGCCA CCTCGGCCTC CCAAAGTGCT
GGGATTACAG GTGTGAG

SEQ ID NO:845: (Length of Sequence = 420 Nucleotides)

CTACACACAT CTGCAATTAC CTGGCAGTAA GCTTGGAGAG TAAGTTTTC AGATGCAGAT CAGAAGAGAT TAGGAAGAGC
TTTGACAGATC ACCGCAAGTA TTTGTATTTC ACTCTAAATT AAACAGAAAA CCCAGGAAGG GTTTTAGGCA GATAAATGGC
ATTATTAGT TCTGTATT AAGTCATCAT TTAGGTTACT GGGGGAGGCT GCCTGAAGT GGATCAGAAG TAAAAGGCAG
AGATACCAGC TAGGAAGCTG TTGCAGTGAG CCAGGTGAGA AGAGAGGGCC ACCTGGACCA GGTAGAAGCA GTACAGGTGA
AAAAANTCAG AACTTCCAA ATCTTCCTCA AGATTINATA CATTATTGG CTGGGCACGG TGGGCTCACA CCCGTAAATC
CCAGCACTTT TGGGGAGGCC

SEQ ID NO:846: (Length of Sequence = 215 Nucleotides)

GNCTGGGTGA CAGAGTGACC CTGCTCAAA AAAACAGTGA TTGTTGTAA GGAAATTATT AAAACCTTGG TTCAATATCC
AATATCTTAA CTTTAAATTT TCAAACTCT CAAACTAGT AAGTATTACT ATGTCTAAG CACAGTGCAG TCCAACGGAN
TATGTAGCC ACATATATAA TTTTAACTAG GCCAGTAGTC ACATTATAA GAAAA

SEQ ID NO:847: (Length of Sequence = 266 Nucleotides)

ACACGAAGAA TCTCTTCAT CGCCAAACAG CTTTCAGAGA TAGATGCTTT GTTCCAATC GAGCATGCTA TTCCAGTGTA
CTGNACATAC TGTACCTC GTGTAGGCA CCTTTATGAA GAGATNAAGN CACTGGCATT TCAGTGGGAT TTAAAGCATT
TTTAATAGCT TCATGTACAG CATGCTGCTT GGTGNACAAT CATTAACTCT NCGATATTTC TGTAGCTTGA NIGTAACCGN
TTTAAGAAAG GTTCTCAAT GGTTC

SEQ ID NO:848: (Length of Sequence = 275 Nucleotides)

CNCTCGGTC CCCTTTAAA AATTACTTTT CAGCCGGGCA TGGTGGCTCA NGCCTTGTA TTCCAGCACT TTGGGAGGCT
GAGGTTGGAG GNTACCTGA GNCGGGAGA TTGAGATCAG CTGACCAAC ATGAAGAAAC CCCGTCTCTA CTAAAAATAC
AAAAATTAGC CGGGCGTNGT GGCACATENC TGTAATCCAG CTACTCGGT GGCTGAAACA GAAACCACCA ACGNCTGACC
TCAGGGAGAT GTCTAAGAGC TTCTGGCATG CCTCA

SEQ ID NO:849: (Length of Sequence = 318 Nucleotides)

GGAATTTTNC TAGTGAGGAG TGGAGGAAGG GGGCCTGGTG GAGGAGTAGC AGCCTTINCA AAGGCCCTGA GGCAGGAATA
CCTGGGAAGT GGGGCGTGC TTGTNTAAGA TGAGGCTAAA GAGGAAGGCG AGGCTTTACT TAGGAGGAAT GGAAGCCAC
TGAGTGTTAA AATTAAAGC AGTNGGGCT GGGCAGAGTG GCTTACACT ATAATCCCAG TACTTTGGGA GGCCAAGGTG
GNTGGNTCAC CTGAGGTCAA NGAGTTINAG ACCAGCCTNG CCCAACATTG GGCTCTACTA AAAGTACAAA AATTAGCT

SEQ ID NO:850: (Length of Sequence = 320 Nucleotides)

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GGATTACAGA CGTGAGCTAC TTCACCTGGC CTGTGTGGCT CTTTTTCAAA AAAAGTTTAC TNGACTCTTG CTTTATTGCA
AGTCCCAGAA TGGATTTGAT TTAGGGA

SEQ ID NO:838: (Length of Sequence = 275 Nucleotides)

AATTGCCAAG GAAAATTTTA TTTTAGCTTT GCATTACAT ATTCTAAATA ATCCTTTTAC TTAATGCAAT CAGATTCTCTG
TGACAAGCCA AATACTTGTT TTTTGTGTG TGIGTGTTC CCCCTACCTT TTCATTGTAT GCOCTTCAGA AAAATCTGAG
AAGTGGGCTT CCATTTTGA AAAACAGGAC TTCCTTAGTA CCATAGATAC GTAGATTGCA ATTTNCCCTT TCCTGCAGCA
TTACTGACCT TGTGAAATGA TGCCTATGGA TACGG

SEQ ID NO:839: (Length of Sequence = 387 Nucleotides)

TTTTGTTTT GTGTGTAGAG ACTGGGTTTT NCCATGATCC CAGGCTGGTC TTGAACCTCT CGGCTTAAGC NATCCTCTCTG
CCCTGACTTC ACAAAGTGCT TGANTTACAG GTGTGAGCTA CCACGCCCTGG CCATGTTTTT TGTGTGAAG GATCTGTTTA
GTTTTATAIC TTTCTGTGGC TCATATCTAA TTAGTTGAC AGTACCTGTG GGTCACTAGG TAGACATTGC TAGCAGACGT
TTAGAAATGA AATACTAGAG CTTGGGAAAA AGTTGATATT TGAGATAGAG ACTTGAAGAA CATTAGCAGA GAGTTGGTAG
TTAAGGTCTG TGAGCTGGTG AGCAATCAA AATAAAGCA GAAGAGAAGA GGAAGACAAG GGTCAAC

SEQ ID NO:840: (Length of Sequence = 367 Nucleotides)

GTACTAAAGC CATGCAGGAA GGAGGAATA ATCAGTGAGC CACGGGCTGA ACTTGTGGAA AAGAAATGGA GGGCAAGGTC
ACAAACCACT CCCTAAGTGC TTCTAATTTA ATGTAATCCT CACTGTTTGT CATTATTGCT TTTNATGGCC ATGAAATCTG
TTTTTCCCA GINTCTAGT GTAATTGGA ATTAATTTCC CAGCTGCTTT ATTTTTTCC TAGAAGAGTC GGGGACATTT
TCAGGATTAG TAGAGGTGTT TCTACAACAC CTTCATGCTT TCGATAGTGT GTAAGAGTTC ACCAATTGAN TTACCTTATT
CTGTCAGAA GTAGTAACTA TGGAGTTTAA CCACTCTGGG ACATAAT

SEQ ID NO:841: (Length of Sequence = 346 Nucleotides)

TGGAAAGGAA AAGCAAAAGA TTGAAGAATA AAAACATTTT GTATTGCCA AAACCTGINC TGTAGCAGTA AGTGTGAAC
AAGTTTGCTA CATTTTCCTT TTGGTTTGA CTGGTTGGG GCTTTTTTGT TTGGTTGGTT TTAAAGGATT TAGGGGATTG
GCAAGTCAGT TTGTCAGATG TCAATGAACA GAAAACCTAA GAAAAAGGT AGCAAAAGTN CTGCTGGCCC CAGATGGATT
TTNCCCTAAG TAATTTCTTA ATCATTAGTT ACAGCTCTGT GTCAAAAGAT GTACATAGAA ATTTATGCTA GATTCTTAAC
ATCTTTCCCT ACTGTGTGCA GAAATG

SEQ ID NO:842: (Length of Sequence = 326 Nucleotides)

GTCTTTTGAA ACAAACGAGA ACAAAGACAC AACATACCAG ANTCCTGGG ACACATTCAA AGCAGTGTGT AGAGGGAAAT
TTATAGCACT AAATGCCAC AAGAGAAAGC AGGAAAGATC TAAATTTGAC ACCCTAACAT CGCAATTAAA AGANCTAGAG
ANGCAAGAGC AAAGACATTC AAAAGCTAGC AGAAGGCAAG AAATAACTAA GATCAGAGCA GAAGTGAAGG AGATAGAGAC
ACAAAAAACC CTTCAAAAAA TCANTGATT CAGGAGCTGG TTTTGAAGAA GTTCAACAAA ACTGATAGNC CACTAGCAAG
ACTAAT

SEQ ID NO:843: (Length of Sequence = 380 Nucleotides)

GGCCTTCAAA TTACAAAAG CAATTTACAT TATAGTAATA GTTCATGTTT ATAGTACAGG AACAAGAATG AGTTAAACTA
AATATTCCAA ATCAGTACAA GTNATTNCT TTTTTTTTTT TTGAGACAGG GTCTCACTCT GTACCCAGG CTGTCTTGCT
TTGTCATCCA GGCTGCAGTG CAGTGGAGTG GTCACAACTC ACTGCAACTT CAGCCTCTCT GGCTCAAGCA AGCCTCCAC

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SEQ ID NO:832: (Length of Sequence = 402 Nucleotides)

CTGTTTCTC CTTTTGTTT CCTATTTATN CTCCAGTGC TAACITGATA TCINCTTGIG TGTACACGIG TGINIGTIG
 CAAATATATT TCTAGGAACA AGAGCAAACA TTCTAGTAAC TATCAITCTC TGATGTGGAG AACITGGGCA GAGATCTGAG
 TTACAGCTTT GTGGATTAT TCTCTGTAT GAGAGATGCG CCTTAGAAT GTCATGGTCC TAACCCGTC ATGGATACCA
 GGGGTGAATG GCAGGGTCT TCTCTGCCC AGGAGGAAGG GTATGGGGAG CCGGTGCATC TTGACTGTCA GGTCACTGT
 CTTACCACCT TTACAGCTAG GCTTCTGAG GTGCCAGCT CTCTGGGAA TTCAAACGT AGTTTAGAGG CAAGCTGGGT
 GA

SEQ ID NO:833: (Length of Sequence = 398 Nucleotides)

AGCCTTTTTC CAGAGATCAG ACCTCTTTAG ACATCTGAGA NITCATAACAG GAGAAAAACC TTATGANTGC AGTGAATGTG
 GAAAAGGCTT CTCCAGAAC TCAGACCTCA GTATACATCA GAAACTCAT ACCGGAGAGA AACACTATGA ATGCAATGAA
 TGTGGGAAGG CTTTCACAAG AAAATCAGCA CTCAGGATGC ATCAGAGAAT CCACACGGGA GAGAAACCTT ATGTATGCNC
 TGACTGTGGG AAGGCCTTCA TCCAGAAATC ACATTTCAC ACACATCAGA GNTTTCATAC TGGAGAAAAG CCGTATGANT
 GCAGTACTG TGGGAAATC CTTTCACTAN GGNAGTCACA ANCTTCCATG TGCATCAAAG GNTTNACANC CGGGGAGG

SEQ ID NO:834: (Length of Sequence = 394 Nucleotides)

CTTTTTGTG AGTCTGTAAA ATCATTTCOA GTTAAATCT AGAGCTTAAT CCATATGING TGCCATCTTT TGCITTTCCA
 CACCTCTNAT CCTAGGTAAG TNAGAGCTAA CGAGTATTN CTGAGCTTCT ATTATGGGCC CAGCATATGT NATAATTCCT
 TTTACACATA GGAATCTGAG GCTTAGAGAA GTTACTGTAT TTACCTAATG GCACACCATA AGTNCCTGGG CTAAGATTTA
 AACTCAGGTC TCTGACTTA ATTACAGATG TCAGCTCGAT GGTAATCATA ATAATATGT NGTGTGTGT GTTGTGTGTA
 TTTATCAACA ATAGTAGTAG CTAAGTCCAT TTCATGAAAC AGCTCATTGG ATAGTCCCAT NTGGATAATT CTGA

SEQ ID NO:835: (Length of Sequence = 422 Nucleotides)

GCTTCTGCC TCTATAGATT TGAATTTCT GGACCTTTCA CATAAACGGA ATCATGTAAT ATATATAATA AGCAAAAGGT
 AACAAACACC AAGCTGGCAA TTTGGTTGAT GAATGANTAA ACAAAATGTG CTGTATCCAT ACAGTGGAAA TATTGGTGCC
 TACTACATGT GGATGGACCT TGGAAACATC ATGCTGAGTG AGAGAGAGCC TTGGTATGT TTCTCTCCC CAGGAGATTC
 CAAGGTGCAG CCAAGGTGA GACCCACTGA CAAGCAATGG ATATGGTTGG GTGCAGATGA AATAAGGCAG CCAGGGGCAG
 GAGGGATGTC TCATTGAAGA TGAATTTT GTGGGATGCC TAGCAGGGGT GGGGGGATGA GGTATTGATA ACCAGCAACC
 CCAATCTTCA ACACAGCGTG GA

SEQ ID NO:836: (Length of Sequence = 408 Nucleotides)

CTCAAAGAG TTGGCATCTC AGAAGGGAAG TGTAAGTAC ACAATTGTCA TTGATGATGA AGAGGACATG GAAACAAATC
 AAGGGAAGA GAAAAATCC TCCAATTTTA TTGAACGAAG ACCTCCTGAG ACTAAAAACA GAACCAATGA TGTGGATTTT
 TCCACTTCCA GTTTTCAAG AAGTAAGGTA AATGCAGGAA TGGGTAATAG TGGTATCACC ACAGAACCAG ACTCTGAAAT
 TCAGATTGCT AATGTTACAA CTTTGAAC AGGTGTAAGC TCTGTGAATG ATGGCCAATT AGAAAATACT GACGGGCGAG
 ATATGAACCT AATGATTACA CATGTAAACA TCACTGCAGA NTACCCACTT GGGAGGATTG TCTCTAACCG GGACTGCAGT
 CCAAGTAA

SEQ ID NO:837: (Length of Sequence = 347 Nucleotides)

TCGCTCTGTT GCCCAGGCTG GAGTGCAGTG GCACGATCTC AGCTCACTGC AACCTCTGCC TCCTGGGTTT TAGCGATTTC
 CCTGCCTCAN TCTCTCAAGT AGCTGGGATT ACAGGCATGC ACCACCACTC CTGGCTAATT TTTGTATTTT NAGTAGAGGC
 GGGGTTTTC CATCTTGCTT AAGCTGGTCT CGAACTCCTG GCATCAAGTG ATCCATCCAC CTTGGTCTTC CAAAGTCTG

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CTAACTAAAA CTAGTCCAAG CACTGAGACA GAGTATTAAA AGATGGTAGC ACACCCAAAG NGCAGGGTGG GTCTTGAATA
GCTAACATGT TTCAAGTAGT GGAGGNAGAT GTGCTTAAAT AGTTACC

SEQ ID NO:827: (Length of Sequence = 426 Nucleotides)

TTTTTTTGT TTGGGACAG AGTCTCACTC TGTCACCCAC GCTGGAGTGC AGTGGCGTGA TCTCGGCTCA CTGCAAGCNC
TGCTCCCGG GTTCATGCCA CTCTCTGCC TCAGCCTCCA GAGTAGCTGG GACTACAGGG GCCCGCCACC ACGCCCGGCT
AATTTTTTTG TATTTTTAGT AGCGACAGGG TTTCACCGTG TCAGCCAGGA TGGTCTGGAT CTCTGACCT CATGATCCAC
CTGCCTCGGC CTCCCAAAGT GTTGGACTAC AGGCATGAGC CACCGCGCCC GGCCGGATGG TTAACAATTT TTAATAATAA
ATATTTAGTG CTAAGACAGG ATATGGAGCA ACAGGAATCT CTATATGCTT GCTGGTGGGG AATGCAAAAT GGGTACAACC
ACTTTTGGGA CAAACAGTTT TAGTAA

SEQ ID NO:828: (Length of Sequence = 402 Nucleotides)

GGCTGCTGC TCCACTCAA CAGGTATCTG GGAGCCAGCA CTCTGGCAGT CCTTCTAAGC TCTAACTCTG GTTTTACTGT
TTTNNAGGTG AAACCTTTGT CCTGGGAAT AGTCTGGCCC GCTCCTTGGA ACCACACTCA GACTCAATGG ACTCTGCCTC
AAATCCACC AACCTTGTC GCACCTCCCA AAGGCACCG CCCTTGCTTT CATCTGTGG CCTCCACCA AGCACTGCCT
CAGCTGTGG CAGGCTATGC TCCAGGGGTA AGCTTACCAG AGTCTGGCC CTNCTCCCT CCTCACTCT TTCTTCACT
TCCTTCTGA GCTCTGGGAG GCCAGAGAG ACCTAGCTCT GTTCCCTCT GNCINGTGGT GGGGACTAGG GACTGGACTT
AA

SEQ ID NO:829: (Length of Sequence = 417 Nucleotides)

ATCGGTAGG AGTCGGCTTT ATGTGGGAAG AGAGAAAAAA ACTTGGTGAA ATGCTTCTG GACTAATGA AGAAAAATGT
AAACTACTTG AAAAATTTAG CCTATTCCA AAAGAGTAGT AAGGCTATGA AGTACAGTCA TCTTTAGAGG ATGCCAGCTT
TGAGAAGGCG GCANAGAAGC ACGAAGTTTG GAGGCAACCT GTGAAAAGCT GAACAGGTCC AATTCTGAAC TTGACGATGA
AATCCTCTGT CTAGAAATAG AGTTAAANGA AGAGAAATCT AACACTCTC AACAGATGA ACTGATGGCA GATATTTCAA
AAAGGATACA ATCTCTAGAA GATGAGTCCA AANTNCCCTC AAATCCACAA ATAAGCTTGA AGNCCAAAT CATCTINGCA
AGGTTCTTC CCAATGG

SEQ ID NO:830: (Length of Sequence = 404 Nucleotides)

GGTTTGAGAG TAGAACAGGA AGTTGTGAGT AGAGCCTTGA AGGAAAGAGA ACAGCAGGTG CATGGNTCCC CAGGCAGGAC
TCAAGGTAGC CACTCAGGCA TCAGAAAGAG TCAGGCGGCC ATGATGGCTC ACACCTGTAA TCCAGCACT TTGGGAGTCT
GAGTCGGGTG GNTACCTGA GGTCAAGAGT TCGAGACCAG CTTGACCAAC AGGGTGAAAT CCTTCTCTA CTAACTACA
AAAATTAGCC AGGTGTGGTG GCACATGCCT GGGACAAAT TTGGATCAGT GTTCTCCAGT CTGAACATAG TCTTCTGTTA
CCTGGGAGAG AGTGGTCAGG TACTTCCAGC TTCAGGGCAG CCAAAGCAT TGACAAAACG ACAGGTAGGA TGGGGGAGT
AAGT

SEQ ID NO:831: (Length of Sequence = 330 Nucleotides)

AATTTACAG GTTGTGCTT CTGAAATCTG TACCTTCTTA CTATAACAT TTAATGTAGC ATTCTCAAC CTGACCAATC
TGCAGAAAAT ATATGTCATA TATTAAATGT GTATACATGA ATATATGCAT TTTCTGGTA AAAAGTCATA GTTTTNCATA
GATGTCATGT AATCTTTTAA GAGATTCTCA AATAGGAACA TGATTCCACC CCAATAATGG TGAAAAATGA TCAATTTAGA
TGAAAGGGAC CTCAACAAGC CTCTTGAGAT ATGAANCATA AAGAGNAAAT ATAAGCCGCA ACTTTTGTAC ATGACAGATT
CATAATGGTT

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CCAGTTAATT TTGTAAAGTT TATAGNGATG GTTTCAGTTA GACCTGTGCT GTCAATACAC TAGCAATTCA CATGCACATT
 TAANTTTAAA TCTAAGTTTA AATTTAAATT AAGTTAATAT TAAATAAGAT TTGAAATGCA ATTCTCAGTC CTACAAGCCA
 TGCTTCAAGT GCTTCATATC CATGTGAGGT TAGTGGCTGC TATACTGGNT AGTGCAAAAA GAGAACATTA TTGTAATCAT
 AGAAATTCTA TTGGTAAGTT TATGGGGTAG TACATGGACT AGAATGTAGT GAGGTAGTGA GCTGTGGATG CAGAGAAAGG
 NCACTGGA

SEQ ID NO:821: (Length of Sequence = 310 Nucleotides)

TCAGCATTGT TTTCTGATG INTGAGATG ATTATTTGGT TTTCTTTTTT ATTGTGTTAA TTTGGTGAAT TGCATCANCT
 TTAGTATCTT AAACCAACCT TGCCCTCTTA GGGTAAACCT TATGTGGTCA TAATATATAA NCCTTTAAAT ACATTATTGG
 ATINCTTTTT TTAATATATT GCTGAGGATT TTTCATGACT ATAATCATAA GAGATATTGG CATATGATTT CCTATACTTG
 TAATGNCITTT GTTAGAAGGA GTTATATTA GGNITTAINC TGGCCTCATA AAATGGGTTG AGAAATGTCC

SEQ ID NO:822: (Length of Sequence = 372 Nucleotides)

GCCAGATTGT NTTCCTTGCG AGCCCTGAC CCCGGCTACT CTTACCAGA CACGGCCCGG CTTGGCCCA CAACACAGCC
 GTCCACCCC TGGTCTCTC ACCTTAGCAG TAGCAGTAGC TCTGGGTGGA GTTGCCAGAG GAGCTGACAG GCCCTCTGCC
 ACTGCTGCCA CCCCAGGGC TAGGGAGGGA ACAAGAGGCC TGCTTGCTGT GCTTGCACAT CCAGCATGCC ACAGCTGCAC
 TAGGNGAGG AGGTCAGACA GTCCCCCAA CAAGNCCCG ATCCTCTINC TCTCCACCAG GGAGGGCCCT GGGCTTTGCG
 CCCACAGNAC AAAACGTTC ANCCCGGGCT GATCATTCTG GGTGGCAGC GG

SEQ ID NO:823: (Length of Sequence = 288 Nucleotides)

AGCTGGCATC CCTGGGGAAC ACCAACGAAC AGTCTCTCA CAGCCAAAT CACCACAGTA CTCCAATCCG NAACCAAGTG
 CCGCATTAC AGCCCATCAT GAGCCCTGGG CTNCTTTCTC CCCAGCTTAG TCCACAATTT GTAAGGCAAC AAATAGCCAT
 GGCCCATCTG ATAAACCAAC AGATTGCGT TAGCCGGCTC CTGGCTCACC AGNATCTCA AGNCATCAAC CAGCAGTTCC
 TGAACCATCC ACCCATCCCC AGNGCAGTTA AGCCAGNGCC AACCAACT

SEQ ID NO:824: (Length of Sequence = 325 Nucleotides)

CTCCTGAGGT CAAAGCTGCA CGTGGGGAAG AGAAGACAA GGAGACCAAG AATGCTGCCA ATGCTCTINC ATCCAAGTGG
 GCCAAGACCG CCACTGCAGG ACCAGGAAT ACCAAGACGN CCAAGTCATC TGCTGTGCC CCAGGCTCC CTGTGTATTT
 GGACCTGTGC TACATTCTTA ACCACAGCAA TAGTAAGANT GTTGATGTGG AATTTTCAA GAGAGTGCGG TCTTCTACT
 ACGTGGTGG TGGGAATNAC CCGCTGCTG AGGAGCCAN CCGGCTGTC CTGGGACGCT TTTTGTGGA AGGAAAAGGC
 TCACT

SEQ ID NO:825: (Length of Sequence = 318 Nucleotides)

AATCAGCCCT ACAGCGATT CTCCACCCC ATTAGCAAAT ACCGTAAATAT ATGNTCTAG TAATCATCCT CTCACAATTC
 TNCITTTCTT AATTNNCCG TGAGTCAAGT TTCTTGACCA CAATGTTATG CTGAGGAAGA TCTAATGTTT TCCATGGAGC
 AGAAATTGTT AGTCTCAAC TCCAAGGTCT GCCTTGTCAA GCCCTGTTN CCGTGTCTC ATAAACCTTG TCAGGCATTT
 ATTTATTGAG CACATATCTA CTGINTCTG CACAAGAAIT CATAAGGTTT TGATGAATTA TGTCCTTCT GAGTGGGA

SEQ ID NO:826: (Length of Sequence = 287 Nucleotides)

TACAGACTCA GGTATAGGG TGINATTTT TAAGTCAATA TTCAGTTTCA CAGCCAGAAT CTGTGAAGAG AGAACAAACC
 ATGAGAAAAC TAACANITTT ATGGTGATTG AGAGGTCCA AGTNCCTGNN GTTTTAAAAA AATCAGTTTT TAAAGATAAA

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SEQ ID NO:813: (Length of Sequence = 310 Nucleotides)

AGGTGGCCTC AGNNCAGCCA AGCTGACCTT GGCACCTGGC TGGCTTCTNT AAGGCANTAG AGTGCCCACA CATAAGCNCA
 CCACCTNTCC CCACCTCCTC CCTTCTCTCC CATGCCACCC CACTTGCTTC CAAGGGCTTG GTTTCCAAAG TNACATCCAG
 GGTGTAAGAG GTTGGGGAAA ACGTCTGCA AGNIGGCTCA GGGATCTNAT TCCATCAGAT GGTCTCATGA ATACTGTGGG
 AGATTAAATC CATCTCAAAA TAGGCAACCA ATGCTATATT CTGAATNINA GGTCTCTGGA CTGAGTCCCA

SEQ ID NO:814: (Length of Sequence = 361 Nucleotides)

GATTGAGCC ATCAGAAATC AGCTTTTGTA GATAAAGAAT ATGAACATAT TGAATATGGA TGAATATATT GTATATAGTC
 AGCTTGCTGA ATTATTTGTT AAGCACTACT AACTATATCT TGGTAACTA TGGTGCAACT GAGCCACCCC CTAAAAGCAA
 AAGACATTTA GCAGTTCACC ATATTTTGCA ATTAACCAAA TGAGAGCCTA TGAGANTGAA ATGNTTTCAG GTGGAGTTTG
 ACAATACAAT TCATCCNTAA TATATAGGEN NAAATATTTC CTCAAAAATA ACATCTATGT GGTAGGNCCT TAAAAACGAT
 GGATGNAATG CATGCAAAAT TCTCTGGTAC ACAGACACAT G

SEQ ID NO:815: (Length of Sequence = 301 Nucleotides)

GAATTINACT CTGTTTCCCG AGGCTGGAGT GCAATGGCAC GATCTTGGCT TACGCAACC TCCGCTGCT GGGTTCCAGC
 GATTCTCCTG CCCAGCCTC CTGAGTAGCT GGGACTACAG GCATGOGCCA CCACGGCCAG CCAATTTTTC CATTTTNAGT
 ACAGACGGGG TTTCACCATG TTGGTCAGGC TGGCCTCGAA CTCGCGACCT CAGAGGATCC GCGCACCTTG GCTTCCCAA
 GTGCTGGGAC TACAGGTGTC AGCCACCACA ACGGNCCTAA TTAATACTTC TTGAAATTTC A

SEQ ID NO:816: (Length of Sequence = 310 Nucleotides)

ATCTTTAACA TATTAAAATA GACATGAGAA AAATGTGTCA TTTGATAAAA TGGGGGAAAT GTAATAAATG ATTACCAGAA
 ATATAAAATT AAGCGTATA TGCNCTTAAG TAAATOGAAT CTAGGCATCC TTAAAATGTA AAAAAGGNTG CAACAAGAGT
 AAGGNGCCCA GAATGATGTA AATTACAGGA ATGGGGTGTA ATGTAACCTC TAGAGGAGGT GATGTTTAGA AGAAGCAAAG
 NGAATGCAAT GANGAAGCAA ACTTGTTTTA GGCAAAINCT CTTGGGAGTG GGACCAGGCA GCGCCCTCTT

SEQ ID NO:817: (Length of Sequence = 225 Nucleotides)

TGGCATGCGC CTGTAGTCCC AGCTACTCAG GAGGCTGNGG CAGGAGAAIN CCTTGAACCC AGGAGGCAGA GGTGCGAGTG
 AGTCGAGATT GCACCACTGT ACTGGTCTCA GCCTAGGCAA CAGAGCGAGA TTCCATCTCA AAAAAAAAAA AAAGTTAAAA
 NTAATATGCT AACTATGATA CAACTGATA GCAATATTGT CTTTAGATTG AAAATAAAAA TAGGG

SEQ ID NO:818: (Length of Sequence = 225 Nucleotides)

TTAAAAAAC CTGTAGTTTC ATTACCTTTT TGAATAATGN CATACAAAAA ATGTATTGNN TTTTGTGTC TGTGAGAATT
 GATGTTTGTA GATTAATAAT CATTTTGTTC AGAATTACAA AATAGTTTTT AAATATTGTC TGAGAAAAGC CAAAGTTAAT
 GCAACCNAGT GGAAACTGTA AGACNNTTG AGTATTGTTT GTTTTATTGG ATGCATTGAG ATTTT

SEQ ID NO:819: (Length of Sequence = 280 Nucleotides)

TTGACTAGCT TCCTACGTCA TTAAAAATTC TTAAATAGT CIGTCTTAAT GGCTGCAAT TTTGTGTAA GTCTGGGCTA
 AAATCTGATG AAATGTTTTA CTTGIGGTTA AGTAATTTAG CAACCTGTAT CTTTTTAAAA TATTACAACCT GGGNATTCTA
 GTACGTCACA AACATTTGTA ATATCATTTA TTTTGTGCCA TTGTCGTGC TATGAAATAC AGTAGAATGA AAATTTACTT
 CAAAGCATTC ATNTCTTCC CCCAGGGNAT GATGGCAAAA

SEQ ID NO:820: (Length of Sequence = 328 Nucleotides)

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GGCAGATATA ACCTTTCTC AACATCTCT AATTGTCTGC ATACCCCACT AATATTGGCT ACATAATACA TTTATTTTGT
 TCATTTGGGA CTAAGTGCCT TACTTAGTIT TGINCAGTGT ATTCATTAAT TGAAGAAATA CTTATTCCAGG ATTTCTATTA
 CTTAGTTTGT CTCAATATAT TCACTAATTG AAGAAATATT TATNCAGGAC TTCCATTATA TGAGCACTGG CCTTTGTGGT
 ACAAAGATAC AACATGAATC TGAAACTCAA TTTAATCTAG AAAGATTTAT TAATATAANC TCATCAGAAA AGCAAGNCAT
 CTACTGTGAT AGCTACAGTA TTGGTTAGAA ATGGAAAGAG AGAGCAGAT

SEQ ID NO:808: (Length of Sequence = 361 Nucleotides)

CAGGCTTTGT ACCAGCCGCC ATACTCTCCA AAAGATGTCC CATCCTTTIN CTTTCCTTTG CATCTTCTC TTTCTTCAGC
 ATGCATCCAG ATGGGTTTAT TTTTCATCCTC TACAGAACCA AACTCCCTTT CATGTGCACG AGTGAGAATC TCTTTGTACA
 GTGTTTCTGC TTGCTTGAAC TTTCTTGTIT TCAAATAGCA GGATGCCAGG TTATTTTNCG TCTTAGCCAC GTTGGGGTCA
 TCAGGTCCCA GTTTTGTCTG GTAGATCTCG AGGGCTCTTT GATAATAATA TTCTACTTCT TCATACTTGC CCTGGGTCT
 GGCACAGTAA AGGCCAAGTT ATTTAACTGC TTGGCAACAT C

SEQ ID NO:809: (Length of Sequence = 353 Nucleotides)

CTAATTTATC TTCATGTCCA GTGAGCAGTG TTGCGTTTTT CCTGTGTAGCA TTTGGAAATG ATTTACTGGA ATTACAAAAC
 CTATTTTCCC TTAAATTTT AGCTTTGGCT CTGGCTGCTT TTTAGAATAA TGCAAGATAA AAATCACACC TGAGGGCTGA
 AAACGGAGAG GGAATGGGAG ACTTGATATT TAAGCAGCTT GAATGGTTTT CONTINCTTT ATTTTTTAAAG AAATGCACCT
 GCCTATGATA CTGTCTCTCC AGTGAAATGA TTACTCTCTC ATTACTCTAT TGATACANTA TTGTGCATGC TAGTGTGTGA
 TTTCTATACA GTAGCTTGAA AATTGATTAA CCT

SEQ ID NO:810: (Length of Sequence = 296 Nucleotides)

GAGGTCAATG CTTCCAGGC TCGAGTTGAT GCCACAGGT GTATTGTACG AGCATTGAAA GATCCAAATG CATTCTTTT
 TGACCACCTT CTTACTTTAA AACCAGTCAA GTTTTGGAA GCGAGCTTA TTCATGATCT TTTAACCATT TTTGTGAGTN
 CTAAATGGC ATCATATGTC AAGTTTTATC AGAATAATAA AGACTTCATT GATTCACTTG GCCTGTTACA TGAACAGAAT
 ATGNCAAAA TGAGACTACT TACTTTNATG GGAATGGCA GTAGAAAATA AGGAAA

SEQ ID NO:811: (Length of Sequence = 493 Nucleotides)

CCAGGAGCTT CTCTCTCTT GCCAGGGCTA TGAGCAGAAA CCTCAAATAA ACCCTGGGCA GAGAAAACCA ACTTAATGAA
 GAGGACGTTG CTGTTCCAC TGGCTTCTAA TTTTGAGAT GCAATGAGCA CTTACGGCTT TTGCAGTGGT TCAGGAAAAG
 GCAAGAAGAA GCAGATTGTC ATGTTCCAAA GCCCTCTGAT GGCTGCATGG AGCCAGCGGT GCTGTGACTT TTTTAAATAG
 CTTCACTACC TTTNATACGT ATGTCTTAT TTACTCTTTA TCTATGCTCT CTTCTCCCA TCAGCCTGGG AGCTCCCTGG
 GGCAGTCTG TTTCTCCCT CCAGTCCGGA NTTCGAGGA GCTGTGCTC CCCCATCACA CTGGAGGCT GTCTNAAGGC
 AGGGGCTGTG GTCTCTGCCA TTAGACTINGA AGCTCCCCAA GGTTAAAGGT CATATCTCA AAAAAGCTTA GAATAGCTTA
 GGAACCTAGG GGT

SEQ ID NO:812: (Length of Sequence = 337 Nucleotides)

AAATTACAT ACTGTAGT NATGCAAGCA AATTCTCACA TAATTATTTT TAAATGCTAG ATAGTTGGTA TAATTNCAAT
 CATTTTAAAT ATGTTAAGAC TTGTTTGTGA CCCTAACATG AGGTCTATNC TGAAGAATGT NCCATGTGCA CTTGAGAAGA
 ATGACTGGAG TGINCTTTAT ATGTATGTA GGTCCAATTA GCTTATAGAA TTGNCCTAGT CCTCTATTTT CTTATTCANC
 TTTTGTGTTG TTGTGTGNT ATCCATTATT AAAAGTGGG TATTGAAGTC TCCTACTATT ATTGTGCTAT CATCTCAGC
 AAACCTAACAC AGGANCA

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SEQ ID NO:801: (Length of Sequence = 408 Nucleotides)

CIGCGTTCCA TGTAGCGTCT TCCACAGINC TCIGTTATAA GATGGTTTGT TACATTGCTG CAGATATTTT TCATGTCTC
 TTGAGTTTCT CAAGACCAGG GTTGTATTTT TCCATGTCTG TCGATGAAAC AGTACATGAC AAAAGAAGGT ACTTAATACA
 TGTITGATAA ATTAATTACT GTTTGGTAAA TTAATTATTG AAGGAAGACC CAGACTGGTT CTGATAAATC ATTGATTACA
 TTTTACAAAT TTGGATAAAT TAGGGGAGCC TTGAGAAGTT AGAGCTCTAG GGAAGGTTCC AGGGAACGTT TGAAGGATGT
 GAAATATGGT TTTCAAAATT CATAGTTTAT TGCAGGATTC TGGNATACTT TCCCAAGTGA GGGGNAAGAT GAGGAAGANG
 ATGGGCTT

SEQ ID NO:802: (Length of Sequence = 343 Nucleotides)

ATGAGACTTA CTCACTATCA TAAGAATAGC TTGGGAAAGA CCCACCCCA TGATTCACT GGGTCCCACC CACAACACAT
 CAGAATTATG GGAGCTACAA TTTAAGATGA GATTGTGGCTG TGGACACAGC CAGACCATAT TAGACTCATA ATTTGNCCTC
 TGCACAGTAA GANCTGGGCT GGGATACCTC ATAGATCATA AACAAATCG CACCCATGAA AAGATTTAGA GAGTCACACA
 GGAAAGTCAA CAGAAGNCAG AGAGATGTGG GTCTGCTGCT TGCATGTCAT TAAGTGGTGG GNTCCTTCAG CTTTCACATN
 TTCAGGCAGT GGGGTCAAGA AAC

SEQ ID NO:803: (Length of Sequence = 182 Nucleotides)

GAATGGCCTT NTCTAACGGC ATGTATGACT TGCATGANCT CTCTAAAGCT GAACTGGCCT CACCTCANCC TGCTTGCTG
 GCAAATGCGG CCTTCAGTGG GAAAGTAAAT GGCAGCTGCT GTNATTACCT GGTCGNTGAA GAAAGACAGA TGGCAAATTT
 NATGCCTGTT GGGGATGACA GC

SEQ ID NO:804: (Length of Sequence = 312 Nucleotides)

TTTATTTACT GCGTTGTAA ATNATCACAA AACATATTCA TTGTCAAGTG AATGCACAGG CTTTCAAAGG TGATTGTATT
 CTGCAAGGTG GGGAAATAGC AACTACCTTC TAAGGTGAAT GTNCAGCTG CCAITTCOA CCCCCAACT CCTCTAGATT
 CTCACAGGG CAGCTTCTGC TTCTAGCCTC TTTTGGGAA GGTGAGCCT GTGTAGAAGG CTTAATACCA ACATGCAGAT
 CCACCTGAGA ATCACTGGAA TGCTCTGGAC CCAGCTGGAA TGCTTCGGGA ACCCAGTCAG GCTTNOGGAA AT

SEQ ID NO:805: (Length of Sequence = 411 Nucleotides)

CATGCAAAAT TCAGAATATA AAAAANTGCA GGGCCTGGTT GCCACATAC ATTCTCTAGG TTAAGGTGGA TTTAAAGATG
 CCCAACAGAA CCAATGAAT CAGAAGCTAA AAGGGACACT TCAGTGATCA GCAGACGCAT TCTCTACGT AACAAATGGA
 GGGAAAGTGA GCACACATTA ACTAGCGAAG TCACAAGGCT AGATTAGGGG TGTACAGAAA TCTAATTCCT GGTGCTATTT
 GCAACTACAT ATATTTAATA TACANGGAGA TAAATACCCA GAACACATTA AGCCTACTGA TTTAAACAGA NCATTTCAAG
 ACTGCTACAC AGAAAGGGAA GGAAGCTGT TAACCCAGCA CAGCAGCACA CCTCACATAT TTCCGTCTCA GAGGTAAAT
 GGAAGGAAG G

SEQ ID NO:806: (Length of Sequence = 287 Nucleotides)

GCATTINAGT GCTGATACAG ATACAGTGAG TTCTGCGCT TTCTCTCT NIATATGAA GGGATTATAA ATGAAGCTCT
 TTAAACATTC TGAGATCINT AAGTTGATT CTACATGAAC TCCAAGTGGT GTTAATGACA TTTTCAGAAA AGATGCTTTA
 CTTAGCTGAC AAGAAAAAGT ACTCTGTAA CTTTATTTG TATGTGATAA AACAGAGTGA ATAAATAAT CTACTATTAA
 CTTATCAATG CAGTCTTACA GAATCCACT ANTTACAAAG TAGATAA

SEQ ID NO:807: (Length of Sequence = 369 Nucleotides)

SEQ ID NO:795: (Length of Sequence = 332 Nucleotides)

GGAAATAAAG GTGACATGAA CTAACATATC AATCATGAAT GGTAGAAAAA AATGAAAATG TAACGAGATG GGATCCGGGT
 CAAAGTCAGG GGAGGTATAG TTGAAGATAT TGAAGGAGTC ATTATGATAC CAAAGAAAAT GGAAAGANGT GGTATCCAGA
 TAGGTTATCC TTGGAGAGTA TCCAGGGATG TCTCTTTC TAAAGACCTTA GAGAAGGAAA GGATGGCTGA TAATATAGGG
 AAAAGTTGAC ATGGAAGGAT TAAATAATTT TTTNAGAATT CACGTAAGGN ATGATAATCT GAATTTCCAG GGCTAGGCTC
 AGAAGCAGAA AT

SEQ ID NO:796: (Length of Sequence = 305 Nucleotides)

CCCAAGGGGA CAGCCTGANC TCCCTGCTCA TAGTAGTGGC CAAATAATTT GTTGGACTGT GCCAACGCTA CTCCTGGGTT
 TAATACCCAT CTCTAGGCTT AAAGATGAGA GAACCTGGGA CIGTTGAGCA TGTTTAATAC TTTCCTTGAT TTTTNCCTTC
 CTGTTTATGT GGGAGTTGA TTTAAATGAC TGATAATGTG TATGAAAGCA CTGTAAAACA TAAGAGAAAA ACCAATTAGT
 GTATTGGCAA TCATGCAGTT AACATTTGAA AGTGCACTGT AAATTGTGAA GCATTATGTA AATCA

SEQ ID NO:797: (Length of Sequence = 337 Nucleotides)

GGCTGCATTA TGACAAGAAG TCAAGCTTCA TGACAGTTAG TATGGGCTGG AGTCTGCAA GTCTGAAC TGTTCTCATA
 GAATGATTC AGGTTTCAGG GTGTCCACC TGCCAGAACC CAAACTACA ACTATGGCG ACACAAGGGA AGTTTITAGAA
 ATCTCCCTCT ACACGCATTT CTGGTTTCT ATTATCTCT CATGGCAGCT GACAGATCTG GAAGTGNAAA TAGGGGATTC
 TCAAAATCAA AGCCANGAAG ACACCTTG TGACACCAAT GGAGTCTCAG AGGGTGGGAA TAGAAGTGAC TINGNCCAG
 GCATTTGCTG GGAACCT

SEQ ID NO:798: (Length of Sequence = 341 Nucleotides)

GAACCTGGA AGGCTAGGC TACAGTGAGC CATGTTTGCA CCACTGCACC CCAGCCTGGG TGACAGAGTG AGACACTGTC
 TCCAAAATA ATAGTGATAA TAATAATAGT CATTATTTTT AAGTCTACAT GCTGAGATGC CAGAACAAGT AAAATTGGAT
 TATAGATCA AGCAGTATGT AGGTATACTT TCATAAATCT AATACTGATG TAATTTTGA TGATTAAAA CAGNCTTTTA
 GTAGGTGTC AAAAATCTGG NTAATTCCTT TCATGNCATT CAAACATTTA GGTGGCCTGT CTTGTTTTTT TTAGNTATA
 ACTTGCAAC ATTCANTTGT T

SEQ ID NO:799: (Length of Sequence = 322 Nucleotides)

TTTTTGAGTA ATGAATTCAT TTAATATAAA CTTTAGTATA GCAGAATACT ACAGGTTACC CACATTTAAC CCTAAAAACA
 AACAAATGAC AGGCACTTCA GTGAAATAAC AAGCCCATGT TCAAATATAA AATGCTAAAA GTGAGAAAGA AATTATGAAA
 ATATATACCT TTAATTTGCA GACATATAAA CACTTTTGGT ACAGTACAGA TGCATGATGC CAAAAGTAA AATGNTCCAG
 TTTAAGCTAA CACATTCCTT GTTTATACAG NITATTTTNC TATAGCTCTC ATATAANANA AATATTNCCA GCTCACACAA
 TG

SEQ ID NO:800: (Length of Sequence = 405 Nucleotides)

ATCAAGAGTT GTTGGTCTA CCGACTGAGC CTGCCAGATA ACCCTGTAGT ACAATTTTIN CAGCATAGTG GAAAAGAAAG
 CCATGNTCT GGGCAGGTCA GGGTTGANC GCTAGTGN TGTATTAATG ATCATGATGA TAGCTAGTAG ACAGGGCTTA
 CCAGATACTA GGTGCTCTCT TAACTGCTTT ACATATGTA GTTAACCTAT TTAATCTTCA TGACATCACC CCTGAGATAT
 GGGTAATATT ATAATGCACA TTTTATAGGT GATGAGAGTG AAGCACTTGC ACAGATTACT CCAGCTTAGT TCATAGCAGA
 GCTGGGACTT TTAATCAAG GCACTAGATG GTTCCAGAGC TTGTACTAC TCTTCCTGGG TCTTTCACAG TCTGAGCTGG
 TCCGG

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CTGINATATT TGTAAATGGTT TACTATGAAG GCTGTTCAT AACCTNCAAT ATCCACTGNT CTGGGTGGT ATACCAAGGA
TA

SEQ ID NO:789: (Length of Sequence = 357 Nucleotides)

TCAATGTGGC ATTGTGTTTT NTAGAAAAC CCTTAGTAA GCATCTCTCT AACCCAGAAT AGACACTGGG TATCCTCCAA
GAGTCCCAT GCTTTCATTT CATCTTCAC CCTCTCTGA GAGGGGAGG CAGGGGATAG GGGTGGTTC AGGCAGTCTC
CAAAATGCCC CTCTAGACC CTGAGAGAA TTCATGTTC CAGCAATAA CCAACAGCAC CTCAGTGGG CATCANAGGG
CCTCTAGGC TCAAGGCTAT TGCCAAAGG CATCTCTGT TTATGAGCTT CACGATGGGA ACCAAGGAG GCTCTGCAA
GACTTCCTAG GGGCTGGTC CTCAACTTA TGGGCT

SEQ ID NO:790: (Length of Sequence = 366 Nucleotides)

TGGCCAGGCT GGTCTGAAC TCCTGACCTC ATGATACACC CGCTTGGCC TCCCAAAGTG CTGGGAATAC AGGCGTGAGC
ACTGCACCA GCCTGTGTG ATCTTTTAA GTACAGTTC CATAGATTTA CATTAGAAT AAAAAAGTCA TGACATCTTG
CTTTTATAG GCAGTTTACT CAAGCTTTT AAAGAAAGAG CATTCTCTT GCTTTTACGT GGTTTTAGAA TGTGAAAAC
CTTTGNTAA ATCTAGTAA TTTACTGCAT TTCCATTAA TTCAGCTTAG TTAGACTGCT GGTCCAGTG CTTGTGTTG
CTGTACATA TACCCIAATA TGCTTTTAA CATATGCCA AATTCC

SEQ ID NO:791: (Length of Sequence = 317 Nucleotides)

AACAACCCA ACCATAATG AGAAGGAAAT GGCCAGAGTG GCCACTCTGC AGCGGGCCCT GGTTTTACGA GCAGAACTGA
GCCTAGCAA TCCTCTGGAA GTCTGCGTA TAGTTACAA GATAGTTTG GGTGAGCGT GCCACGAAAT GTGAGTGCT
TTCTCAGTA TCCTACAGG CAAGAAAGG GAGATTTAC TGGCATGGG GAACGAAAG GTAGAAATGT AAAATTCCCA
AGCCTCTGC AGGAAGTGCT TCAGGNTAC CACCACCACC CINACAAGN GATATTCTAG GGGGTACTCA AGAGCAT

SEQ ID NO:792: (Length of Sequence = 258 Nucleotides)

GATCAATATA TCCAGGAATT TGIGAAAAGA TCCTAAACTT TTCAACATG TCACAGGTAG TACTTGAAGT ATGCTTGTA
AAATGTACCG GTTAAAGCAG TATGTTCTC AGATAGCCTG AGATTTTATT TAACAATTAT GTATCTAAGT CTAATAATAC
ATTTGAGCAA AAGAGTGTG GGTNCATAA TAAGANGTCA GTATTTCACT TAGATTATT CAGAACTTG TAAGTNCCTG
TAAATAGCTA CTCIGAAA

SEQ ID NO:793: (Length of Sequence = 282 Nucleotides)

GGAATGACAT GGTCAATCTN ACTTAAAGA AACATTTTAG GTTCACACTT GCCAAGTTAG GAAGAAAACC AACCTTAGAT
CCTTCCCCC CCACCAATAC TCCTTCCCC AAACACCGTC CCCACCGNC TCTATGTTA ATTGAATTTT TATTTGAT
ATATAGAAA CCTAACCCAT GGCTGINATG CTGAGTGTCA TTTGGCTTCA AGCTCGAACC AGGGNACAGC TTGGCCTGGA
ACCCTGAGAC AAGATGCTG CCTCANAAGG TGGGGCTCA CG

SEQ ID NO:794: (Length of Sequence = 330 Nucleotides)

GTGAGGCTG CAGGGAGCCA TGTTACCCC ACTGCACTAC AGCCAGGGTG ACAACAAGAA CCTTTCTCGG CGTGAACCCA
GGGGGGGAG TTGCAGTGAG CCAAGATCGT GCCACTGCAC TCCACCAGCC TGGGTGACAG AGCAAGACTC CGTCTCAAAA
AAAAGTTTAC TACTCGGCTT TAATTAATTC GTTTCGGTTT TGGGIGAAAT NATTTTATTA CTGACTGGTT CCTAGTTGT
ACAGAAGCCT ATTATCTTTA GAGAGACTCT TCATGGTAAT TAACTCAGAT TCTTATTTTG CCTGGGTGAA AGGANGGCAA
GTGGATCTAA

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TGTATTGACA TTCTATTTTC TTTCTCCTCC AGATACTATT TTTNGGATTT NAAACATACA CAATACTTAG GAGACTTGTT
 TTACTCAGAG TGGAAAATTT TNCAGGGAC AAAGTCAACA CAANGAAACA AACAACAAA AATAGCCAGA AAGAGAACAG
 TTAAGTGCAG CTCGGTGAGT CCCGGCAGTT CCTTCCCGGC ACTGGCTCGT CCCTGGGGTT CTCAGGGTTC CATGCGGCCA
 CAGCGTCCGT CCACCTGTTC CACGNGAGCC ACATGCTGGA ATT

SEQ ID NO:783: (Length of Sequence = 350 Nucleotides)

CATTCAGGCC GGGCACAGTG ACTCATGCTT GTAATCCAG CATGNTTGA GACATAGCAG TAGGGACTAT CGACAAAGAA
 ACACACAGAG GGAAAAAGAA TTCCACATTT GGGAGGCTGA CGCATGAGGT TCACCTGAGG TCAGAAGTTC AAGACAAGCC
 TGGGTAAACAT GGTAAAACCC CGTCTCCACT AAAAATACAA AANTTAGCTG GGCATGGTGG CCTGGGGCTG CAGTCTCGAC
 TACTTGGGAG GCTGAGGCAT GAGAACCTCT TGAACCCGGG AGGTGGAGGT TGCAGTGAGC AGAGGTTCATG CTACTCTCAA
 GCTGGGGCA ACAGAGCGAG ACCCTGTCTC

SEQ ID NO:784: (Length of Sequence = 265 Nucleotides)

ATAACTGAAA AATGGAAGAA AATATTGCA AATTACACAT GTGAAAAGCA GTTAATATCA AAAATATATA AGANACTCAA
 AGGACTATAC AACAAAAAAC AAATAACCAT GAAAAATAAG CAAAAGATAT ATATAANINA TTTNCAAAGA AAGACATACA
 TATAGCTTGG CAGATAGATG AATATGGCTC AAAGTCAATT ATCATCANGG AAAGGCAAAC CAAAACAACT CTAAGATATA
 AACTCACTCC TGTAAANTG TTAA

SEQ ID NO:785: (Length of Sequence = 363 Nucleotides)

GTAAAGNTTG AGAAATCGGA TGGTGTCTGT GTCTGTGTAG AAAGAAGTAG ACATGGGAGA CTTTTCATTT TGINCTGTAC
 TAAGAAAAAT TCTTCTGCTT TGGGATCCTG TTGATCTATG ACCTTACCCC CAATCCTGTG CTCCTTGAAA CATGTGCTGT
 GTCCACTCAG GGTAAATGG AAAAAAAGAA AGAAAAATGA AACCAGGAGT TGGCAATTAC TTTTTTTTTT TTAAAGACA
 GAGTCTTGCT CTGTACCCA GGTGAAGTG CAGTGGTGAG ATCTTGGCTC ACTGCAACCT CCACCTCCCA AGCTCAAGTG
 AATTCTCCAT GCCTCAGNCT TTCAGAGTNA CTGGGGATTA NAA

SEQ ID NO:786: (Length of Sequence = 291 Nucleotides)

AACAACAATC AGCCACAATG TGCITTTAAG GATTTAACTG ATAGTAAAGA TAAATGTGAG TMTAAGAAT GGGATTTTTA
 GACTAGGCTG ACACAAGGGA TCTTCTTINA ATAAGGNTCT TGACCATTTG TMTTTTGGG GCTCATCCTT AAGGGCTGGA
 CAGGAAGAAT CCTGTGTAT GTGTGCATGT TGAGCAATGC AAAAAACACT CTGCCAAATC CTNGATACCA CATGGTCTNG
 AGAAATGCAT GAGTGATTIA ACGCACGNT GGGTGTAGTC ATTATGTTCC T

SEQ ID NO:787: (Length of Sequence = 256 Nucleotides)

TATTTCTGTA TAATTTTAT TATGACCATA AAAATAACAA TGTAGTCAAT AACAATTAA TTGTACATTT TAAATAATT
 AAAGTATATA ATTACACTGN TTGTAATAAA AAGTATAAAT GTTAGAGGTG ATGGATACCT TATTTACCTT AATGTAATTA
 CTACACATTG TAGGCCTGAA TGAAAATATG CCAATATAAGG CATAAATATA TACACATACT ATATACCCAC AAATACCAAT
 AATAAATTC AATAAG

SEQ ID NO:788: (Length of Sequence = 322 Nucleotides)

GGTCCAATGA AGCTTCAACT CGTTTTCAGC TCAAAGCAGA CGGCAAATCA GCAAAAAGCA AAAATAATGT ATCTTACTGC
 ATTACAGACA AAAAAAAGAA AAAAAACAGA GTGAACTAG ANCTATTTTC AATAGTAGTT TCTGACAGC TATATAANCA
 AATATAGANG ACATTATGGA ATTAGTGATG TGAACGAGAA CTTGTCCATG TATCCTGCCT GCCAGCAAAG GTAGAGATGG

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AACACTGGGT AAGCACTTTG TATGINCTGG GCACTCTGCT AGAGATAATG TGTCTGGAAT TGGTGGGTTT TGGTCTCAC
TGACTTCAAG AATGAAGCCG TGGACCTCG CAGTGAGTGT NACAGCTCTT AAGGTGGCGC GTCTGGAGTC TGTCCCTTCT
NATGTTTCA TGTGTTTCA GTTTCTNCT TCTGGTGGGT TCGTGGGTCT CGCTGGCTCA GNGTGAAGC TGCAGACCTT
TNGGTGAGT GINACAGCTC TTAAGGCGC GGTCTGGAG TGTGCTGTC CTCCCGTGG GCTGCTGGTC TCGTGGGCT
CAGGAGTGAA GCTGCAGATC TTOGC

SEQ ID NO:777: (Length of Sequence = 229 Nucleotides)

ATTGGGGGAA CCAAGCCCA NTAATGCTAT GGCTGTGCA GACTTGTTAGA GGTACTGCCT TCATGGTCTT NGGTAAAGATC
TGGGAGAATT CCTGGATTA CCAGGCAGAA ACTCTNATTC TCTTGCCCTA CTCCCCCA AACAAATNAG TCTCTCTCTC
TCTCTGCTT GAGCTGCCTA GAGCTGAGG AGGGGGTGAC ACAAGCACAG CTATGTCACC AGGAAGCCA

SEQ ID NO:778: (Length of Sequence = 361 Nucleotides)

CAGAACTCA GGAATAAGC CATTAACITT CAAAGAATAT GTGTGTGTG TCGATATTTT CCATTCTTAA TCCACATCCA
CGTGGTCAA GTAGAGCTTC CTAATCAGAA GCACAGCAGT TGCCATGGTG TTCTCTTCCA TCTGAAAGCA GCAATTTTCC
GCAGGTCCA TTACAGAAT GTCCATAT TACTCAGATT CTAATGTATA TTAATATGC TTGGAAACT TAACAAGAAA
CGTGCAAGC CTCAGTAAAG AAAAGTTGTA GAAAACAAA ACTGAACAGC AGGCTTCTAG TTTCTCTCT CCCAAATGG
CCTTAGTGGG ATTCAAAAAT GGAAGTGTG AATAAACTG C

SEQ ID NO:779: (Length of Sequence = 392 Nucleotides)

CCTAAGATGC CTGGCACAAT CAAAGACCTT TGGTGGCTTC CAGCATTTAT AAGGCAGAGT CCAACACAC ACTTAAGAAT
GACTTACTCC TCTGGCGAC CCACCAATC OCTACCCCG CTTGGCTCT GTCTCTCTGT GGAGCTGCC CTGCCCTAA
ACACTGCTC CTCTTACCA ACCCGACCA TATTTCCCT CTCCCTCA CCAGGTCCAG CAGTACCAC CAGTTTGTG
GACATCTCC CAAGGAGCTC TCACTATCA GAAGCAAGGA GTAGCCCTC AGCCCACT CTGTGCTTA GGTCTACAGT
GAGTCTCCAG TGATGCTCC TACCGACTGC TTGGGGTGC ACAAGAGTNA GGCCAGCAAG ATNCCAGCG AA

SEQ ID NO:780: (Length of Sequence = 453 Nucleotides)

CTCTCTATTT TCTCTTTTCC TTTTGACCTA CCATAGGAGA CAGATTGCTC ATCTCCAAAT TTCTCTGCTG TCTGGGANT
GCCGTGTTTT CAACCTTGGT TAGGGTTTGG CTTAGGAATA GCATAATAT CCTTTGTGAG AGGTAAACA CTTGAGTTAA
ATTTTGGAG CCAGGTGTGG TGGCTCATGC CTGTAATCC AGCACTTTGG GGGGCAAGG TGGGCAGATC ACGAGGTCAG
GAGATCAAGA CCATCCCTGC CAATATGGTG AAAACCGTC TTTACTAAGA ATACAATAAT TAGCTGGATG TGGTGGCACA
CGCTGTGGG TCCAGCTAC TTGGGAGGCT GAGGCGGAG AATCGCTTGA GNTGGGGAA GTGGAGGTTG CAGTNAAGGT
GAGATCGGC CACTGCACIN CAGCTGGG TGAAGAGCA AGACTTCCGT TTC

SEQ ID NO:781: (Length of Sequence = 306 Nucleotides)

AAGCTACTCG GGAGGCTGAG GTGGGAGAAT CGCTTGAACC TGGGAGACGG AGGTTCAGAG GAGCCGAGAT TGGCCATCA
CACTCCAGCC TGGGCGACAG AGTGAACTC CATCTCAAAA AAAAAAAAAA AGAACCACCA CTNTAACTGA GAAATAGATG
NTCCATTAA CAGTTTAGAA AATGTATATA ACTCTAATCC ACAGAGGTTT ATACTTACAA GCAACTCATG GTTCCCTTT
TAAGGCCAC ATGTGGAAAA TTAATCTGAA CAGTTAGTGC AAGGAGGAGT CATACTCAG TGGAAA

SEQ ID NO:782: (Length of Sequence = 443 Nucleotides)

GTCTGGGCT CCTGACCTCA GGTGATCTGC CTGCTCGGC CTCCAAAGT GCTGGGACTA CAGGCATGAG CCACTGCACC
TGGCCTAATT CTACATTTTN ATCTACAGCA GACCTTTTAT CATAAAGAG TTCTATATAA ACATTTCTCA AAAGAAAATA

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ACCTCTCTTG TTATCCCCAC TTTTCATGCT CTATGTCCCA TAGGCAATTT GACAAAGACT GCTTTGACAA AGGATTCTTA
GACTTCTATC TCTACCTCTC ATCTGACTTG GCGGAGGAT TAGG

SEQ ID NO:771: (Length of Sequence = 357 Nucleotides)

CAGCTCACTG CAACCTCCAC CTCACAGGTT CAAGTGATTG CTTCCTCAN CTTCCCAAGT AGCTGGGACT ACCGGTGCAC
ACCACCATGT CCAGCTAATT TTGTATTTT TNATTAGAGA CAGGGTTTCA CTATATGTTG GCCAGGCTGG TCTCAAACCTC
CTGACCTCAA GTGATCCGCC CACCTCGGCG TCCCAAAATG CTGGGATTAC AGGTGTGAGC CACCATGCCC GGCTAAAIT
ATAGCTATTT TAGAATGTTG AAAGTAGTAT TATGTGATTT CAGTTTGCCA TAAATTTTC ATATGGTTAC TAATTATTTT
TNTTTTGTG GATATATCTT CTGGAAATCT ATTGAGG

SEQ ID NO:772: (Length of Sequence = 359 Nucleotides)

CCTCTCAGGA AAACACCTAG ACATTATGTA ATGTATTTGA AGATTAATGT ACCCTTTAAC CAGCAGTTGT GTACCTAGGT
ACAAACTTTG CAAGCACACA CGCATGINTG TNCCTAAAAG CACATACAAA AACACTCCTA ACAGCATTAT TTGTAATAAT
AAAATATAAG AAATTACCTA AATATCCATC GACTGCCATT GGTAGTATGG TTATACAATG GAATCTTACA CAGCAATGAA
AAGGAGCTAG AGCTACATGC AACACATGG ATACAACCTCA CAAACGTAAG ACTTAGTGGG AAAANGCTAG ACACAAAGTT
AACACCTTCT ATATGTGGGT TCCAGTTATA TAAAACCCA

SEQ ID NO:773: (Length of Sequence = 361 Nucleotides)

GAGCCTACGG CAGAAAAGA AACATCTTCC TATAAAACT AGACAGAATA ATTCTCAGAA TCTGCTTGC GATGTGTGCG
TTCAACCCAC AGAGTAAAC TTINCTTTG ATAGAGCAGT TTTGAAACAC TCTTTTGTGTA GTATTTCAT GTGTATTTT
AGAGCCCTT GAAGCCTACG CTAGAAATGG AAATATCTCC CCATAAAACC AAGACAGAAG CAATCTCAGA AACTAATGTG
TGATGGCTGC ATTCCACACA CACGGTGGAC CATTTCTCTT GATAGAGCAG TTTTGAAACA CTCTTCTGT AGAATCTGCA
AGTGGGATAA TTGGGACCTC CTAGAGGGCC TTCGTTGGAA C

SEQ ID NO:774: (Length of Sequence = 387 Nucleotides)

GTTTCGCTCT TGTGCCCAG GCTGGAGTGC AATGGCGCAA TCTCGACTCA CCACAACCTC CGCCTCCCAG GTTCAAGCAA
TTCTCTGCC TCAGCCTCCC GAGTAGCTGG GATTACAGGC ATGCGCCACT ACCCCAGCTA ATTTTGTATT TTNAGTAGAG
ATGGGGTTTC TCCATGTTGG TCAGGCTGGT CTTGAACCTC TGACCTCAGG TGATCCGCCT GCCTCGGCCT CCCAAAGTGC
TGGGATTACA GGCATAAGCC ACTGCGCCA GCCAGAAGAT GCATGATTTT TTAGGATCAT ATGCTGTTTG TAGCCATAAG
GTAAATCATG TCTCTTCAA TCATGACTTT TGGGAACCTC CTGAATAATA AAAATGAGAG TTGAGAT

SEQ ID NO:775: (Length of Sequence = 401 Nucleotides)

GAATTINICT TTCTGCATCG TTCGTGCTA AAAAGGGGTA CTACTATAGA ATAGAATGCA GGCTTAGGAC CCCCCTAAGC
TCACTGTTCA ACCCAGCCCA GCAAACTGGT CAGTTATAAA TTTTNCCTGCA GGTCCCTGAA ACAACAACAA AAAACTGGAT
GAGGTTTCCC TCCATCTTG TTTTATGTCC TTGGGAGCTT GACCTTATAA CCATACGGCG GTACTTTTNC TTGGTCTCTG
CCATCCAGGG AACCAGAAAT TGGGGGGTTA TGTATAGTT AGCTCTAAAA ATTATCTTGA GCAGTTAAAA GCCTTTGCAA
GCTTAAATTT GACTGCTGTA GGTCCCTTCT GGGGAAGGAG CAATGGGAAA CCTTNCCTAA GCTTATAGCT CACCAGCTG
A

SEQ ID NO:776: (Length of Sequence = 345 Nucleotides)

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ACAAAGTTGG AAGTACTCCT AATGGAGCGA AAGATTGCTT AAAAGCCATA ATGAAAAGGG TAAATCATAA GGTTCACAT
GTGCTCTGC AAGCACTAAC TCTTCTTGGG GCTTGTGTGG CAAACINIGG AAAGATATTT CATTTAGAAG TATGTTCCCG
TGGATTTTNC AACAGAAGTA CGTGTGTGA TTAATAATAA GGGCACATCC TAAAGTATGT G

SEQ ID NO:765: (Length of Sequence = 329 Nucleotides)

TTGTCTGCTT GATGAGGAG CTGAGGAGCT GCACAGAAGG TTAAAGAGC TGTAACACAA ACAGGGCTGC AACATGCCCC
TTGCTCCCA CAGGAGAGA AGAGCTCTGG CCTCGGAGA AGCCAGACC TGGGAGCTCC TTGAGCCCGG GCTGTGACTC
CCTCTTTGGG GCCCCTGGTG GCGTACTGC ATTGCGAGT GCGCTGTG GAAGCTGCTT GTATGCGCC TGGTCCAGGG
GGAAGCTGTT TGTGTGTGC CTGGTCCAGC CACCTCATGG AGAGCCTGTG CTGGCACCTG GGAGCTGCCC AACCTGGGCA
GCAAGCTTT

SEQ ID NO:766: (Length of Sequence = 321 Nucleotides)

GCACTGGCAG GTAGATTTTA TTGGCTGGG ACACACAGGG GATACCTCA CCCAGATGG GGTGGGGGT GTGGTGTGA
AGATATAATC TATGCTCAC TTGTGGTGA ATCGGGGTT CTGGCTGINT TGGATGAAGG GGAGCCGAGG GCCAGGTTGG
CTGGTAGCTG CAAACCGAC TTCTCTGCTG GCTGCATCTG CACAGGGAGC TGGGGGAAG CAAGGAGTCC AGGGGCTGGA
TGCAGAGCTT GAGTCGGAGA AGCCAGTCTG CTGGTTAGCA TGINCCATCT GCTTTTNCAG GGCAGGGCA CCACCAGGCT
T

SEQ ID NO:767: (Length of Sequence = 313 Nucleotides)

ACCGCCCCCTC TAGTTCACCTA TTCTGTCCCC GGTACCCAGG GCATCATAGA CACTCAACAA CCATTGCTTG AATATGCAAT
TGGATGAAT GAATAACGA CCAGAGGAAT AATCCAGACA GAGCAGCAGT GGCCAAGGGA AGGGAGGATT GATTTATGGG
AGAAAATTAG GGGAAATGAA TCCATAGAAA GGGTTTGCTT AAGTINAGAT GATGACTINGA GCCAGAAGAC ACCCGGGGA
GAGGAATINT TTCACATGGT AGGAAAAGGG GAGGAGGGAG AGAGGTGGGG TGGTGGAGIN CAGCCTCGAG GCT

SEQ ID NO:768: (Length of Sequence = 372 Nucleotides)

TCTCTCTCT GCGTGTAT ATTCTGCACG TCCTTAGTAA CCCCTGTGGC CCCTTCTTA CTAGGCTC TCCTAACATG
TATCTATGAC ACATTGATCC CTAACAGCTA TGATTCTNCT TACTCTTIN CAGTAATTTA AATTTTATCA TTCTACTGCT
TGTTCAATAC ATCTCTCTAT GTAAATCTTG ACTCCATAAT GAGGTTTTTA ACTTCGAAGG GGTGGAAGT TATCTGCTGC
CTTGGTACCC CCCGCCATT ACACAAGAGT ACATTTTAAG CACATTACAC CTGAGTGATT GTNGTAAAC ACAGATGCAA
TCTTTCCACC ATCTCTAGG AATCTCTCTG TGGGCTTTCC ATTGGGTAC CC

SEQ ID NO:769: (Length of Sequence = 321 Nucleotides)

GCAGCCAGAG CTCCAAGGCT CCCCGGGGG ACGTGACGC CGAGGAGGCA GCAGGCGCTT CCCCCGGAA GGCCAACGGC
ATGGAGAATG GCCACGTGAA AAGCAATGGA GACTTATCCC CCAAGGGTGA AGGGGAGTCG CCCCTGTGA ACGGAACAGA
TGAGGCAGCC GGGGCCACTN GCGATGCCAT CGAGCCAGCA CCCCTAGCC AGGGTGTGA GGCCAAGGGG GAGGTCCCCC
CCAAGGAGAC CCCAAGAAG AAGAAGAAAT TINTTTTCAA GAAGCCTTTC AAATGAGCG GCCTGTCTT CAAGAGAAAT
C

SEQ ID NO:770: (Length of Sequence = 364 Nucleotides)

TTAAATCAGG AAATGTGATG CCTCCATCTA TGGTTTTTGA AAGTCATCAG CCAGAGCTAA GGTAATGAGG ATTCCCTCCT
TCATGTTTAT ATGCTTTTAC ACTGTGCACA ACTGTCCCTA AAAAAACAA CCCCTGGCCA ATTTCTCCAG GCTTATGCTC
TCCCGGTTT CAGTTACATT TCAGCTTAGC ATTTTCAAAA TAACAATTG TTCTTGGCAG CCTGTCTATA TATTINATTT

232

SEQ ID NO:758: (Length of Sequence = 356 Nucleotides)

TTTTTTTGTA TTCTTTTGT ATATGGGTTA AATGTTTCCG TTATATTCC TAATTGGCTA TTGCTCGTAT AAATAGATGT
 GGTTTTAGGC ACATATTTTA TATCTGGCTC CTATACTAAA AATCTTTTAT CATTTCCAAC AGTTTTCAGT TATGCTCTTG
 GGTTTGAAGG TAGACAATAA TGTCATCTAC ACATAATGAT ACINCTGTTT TCNCTTTTTA AATGCTTATA GCTCTTINAT
 TTTTATTGCT TTGCTTGTC TATAAATNCT AGAATGAAGT TAAATAATCA TAGCAGATAT CCTTTTCCT GATTTAATTA
 TAATGCTCCT GAAATTTTAT TAAGTATGAT GACTGT

SEQ ID NO:759: (Length of Sequence = 333 Nucleotides)

GCCATGTGGG GCGGGGAGG CGGTGGGGTC GGGCGGGGGG GACGGTCAA GACTTCATAA ATAAGAGGCG GGTCCAGAC
 CCNCAAATTT GTCAACATGT CTTAAATAGG TGCATTATTT AAATCTTATG TACAACAAGA ATCATTTCG ATAGCAATGG
 TGAGGACACA GGACGGGTGC AGTGATGTGA CTGGGTCTTC TTGTCCAAG GCGGGGGGCG GAGTTCCAG CTCAGCTCGG
 AGCCTCTAGG AAGAAAGCAT CCTTCGTCCG GCCCGCAATN GTGGCATCGG AGTTGACTTT TCCCACACGA CGGCATCAAN
 CACAAAGGCA AAG

SEQ ID NO:760: (Length of Sequence = 311 Nucleotides)

CGTCTCTCT GCCCAACCCG CCCCCACCA TTGCGGAGGA GGCTGAAGAT GGAGATGGGT CCGGCAGCAT CTNCGGTTCC
 ACOGGAGACC GCTTGGTGGC ATCAGCTTGC CCGGCCCGGC CGCAGATATT CCGGCCTCGA GAACAGCTCA TGCTGAGAGC
 CAACAGCCTG AAGAAAGCAA TTGTCAGAT CATAGAACAC ACAGAAAAAG CTGTCGATGA GCAGAATGCC CAGACCCAGG
 AGCAGGAGGG CTTCGTCTG GGGCTCTNIN AGTCAGAGGN GAAGATNGAC CACAGAGTTT GNCCACCACT T

SEQ ID NO:761: (Length of Sequence = 314 Nucleotides)

TTTTTTTCT TTTTTTTAAG AGACAGGGTC TCACTCTCTT TCCCAGGCTG GAGTGCAGTG GCAACGATCA TAGCTCACTG
 CATCTCGAA CTCCTGGCCC CAAGGGATCC TCCACTTTG GCCTCCCAA GCACTGAGAT TGCAGGCGTG AGACACCTCA
 CCTGGCTTGT CTGAGAACAT CTTTTAAAA AAATCCCTTC TCTTGGGTTT TCTGTTACCC ATATGCTAC TCAATTTGGT
 TGCTCAGCT TTGTTGTGT AATGCAAAAG CAGCCATAGA CANTACATGC ATTGAATGAG TGTAGTGCAT TCCA

SEQ ID NO:762: (Length of Sequence = 319 Nucleotides)

ATAAGGTAT ATAAAGTTG AAATTAAG ACACATATCA TGAAAATACT AACAAAAAGC TATAATAGCT ATATTAAATAT
 CAGGTAAAT AGACTTTAGG ACAAAGCAT TATTAAGGAA GGGAAAGTTG CTATAATAAT AAAAGGTGA GTTAATCAAA
 AAGATATAAT AGTTTTAAAC ATTATGATA TAATTAANIT CCTCAAAAAT AGACAAAGCA CATATTGATA CTTAAGGNAG
 AAATTGATAA ATCCATCACC ACAGTGGGAA ATTAGGAAGT TTCTGTACAC CTCTTTCCT TGTGATAGG TCAAATGGA

SEQ ID NO:763: (Length of Sequence = 369 Nucleotides)

TCCAAACCTC TGCCAGATAT AATCTAAAA ATCTGTTTGT TAATTTTATT ATTTTATTTT TGGATTTTAA AATGCTTGGG
 AATTGGGAGA TATGCACAAT TGTCTTTGCT TTGTTACAA AATTAAATGC GTATTGGGT ACTTATAGGA CACTATTGT
 AAAACATTT ATTTCTTCAG ACATTGATGG TCTGTCCCA GTTATTAACA ACATCTACAT GTTTAAGAAT AAATTTCTTA
 TCTACTTCTT ATTCATTTGA AAATTACCTT TCTATCCTCC TACTCTGGAA GTCTTATGN ATTCTGTCTT AATCATTAGT
 ATCCCATGTC TTCTTCAAGA GGATGTCTGT CCAGTAGGAA TTTCTCCCA

SEQ ID NO:764: (Length of Sequence = 381 Nucleotides)

CGGTAGCAG TTGCTGAGTG TCAGTAGAC AGCAGOGACT AGGGCTCGG CCGCGGCGAG ATGCCTTTNT TCACCGCCAA
 CCCCTTCGAG CAAGACGTGG AAAAAGCCAC GAATGAGTAC AACACTACAG AAGATTGGAG TCTTATTATG GACATATGTG

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TTATCTTGTA AAATAATTG TTCCATTTCT AATTAGTACA TAATGAGAGA GGCAGTGTGA TGGTTTGTGC CTAAGNCCTT
TCTTGCCAAG ACTTTCAAAG CCAAAACTT CANCAGTTTT CCTAGATGAC TAGACAG

SEQ ID NO:752: (Length of Sequence = 359 Nucleotides)

AAGTCAGGCG TTCTGGGGC AGCTGTCTG TGAAGTTGGT GGGACGTGCT ACCCTGGGCC AGCTCCAGGT GAGCNTGGCT
TCGGTGGTCC CCGTGGGCTC CTNAGTGGCG AGGGTGAGGC CTGGCACTGG GCCTCTAACT GGCCCCGTGG CCCTGCAGTC
TTTNGTGTG GTGTCCCGCT TGCCCTTTNT CCGGCTGTTT CAAGCGCTGC TAAGCCTCAT CGNCCCCNAG TACTTTNACA
ANCTGGCGCC CTGNCITGAA GCAGGTGAGT GGCCATCANT CGTGGTCATC TTGNCCTCAT NATCCAGCT TTGGCCCCTG
GTGGGGCTCG GCAAGCAGCT TCTCCTTGGG GAGGGTCTT

SEQ ID NO:753: (Length of Sequence = Nucleotides)

AGCTTCAACT TGGAAAGAAG GATGATGCAG TTTTGGGCCC TCCGGCCATC AATNACCGAC AGCNCCTTGA CCTTGGGGGA
AGCCAGGTAT ATGINTTCAG TGGAGCCAG CTCCTTCTGG TGCCCTCTGT AGGCTGAAAA CATCTTTTCA AAATCTCTTA
GGTCCAGGNT CCGAAATACC TGCATGTCAT CAATCTCATT CCATACGGTG CCAGGGACAC GCTCCTCATT CAGCTTCACC
CAGTTGAAGG ACTTCAGTGG GTGAGAAGGC TGGGGGACAC GCTTTTTCTT GAGTGGGACG

SEQ ID NO:754: (Length of Sequence = 342 Nucleotides)

CTGTTGAAGT GCAGGTTTGA TCCAGCCAGT ATAGAACTAG CTCTGTAGGG GTGAGGAGGA CTGINTGTG TATCATCCTT
GATTGINTTC CTTCAAGGAG CATGCACTG TAAGTACATC AGAATGACAA ATTGATGAAC TGCAACAGTA TCTTTTGTG
AATGTTCCAC ATAATGCAAA TGCCATACGT TGTGTGAATA TTATGTTGGA ATACAGTGTCT GATATCTTGG AAAACCATAA
CTGCCCTCTA ATTTAACATA GNGTAATACA TAGINTGTGA TTTTTTTTAA AGTGAGCTNT AATGGGNAAG TATTTTNTAT
ATGCTTTTAC TATAGCTAAA GG

SEQ ID NO:755: (Length of Sequence = 321 Nucleotides)

CATTGCCATC TTCTCAGTCC TTCTCCCTTT CTTTCCAAGT AGTTTACGGC CCTAGGGCGA AGGTGGCTTT TATTTCTCT
CTTGGGGGAG GAGGGGGAGG GAGCTTTCCC AAGCACATCA ACCTAAGGAA GGGGTGGTTG CCCCCCAGC AGCGAGGGGC
TGGAACGTCT GATCATTCGG AAGGAAGGGT TCGTTCTTGT CCACTTCTG GCCCTTGGCT GCAAGGGTGT GCTTNGCAGG
GGTCACTCCC CTTGGGGGTG GCAGCTCTG CATCAGTNGA GGGCACAAGG AGGTATCTGC TGGTGTTCAC GAAGAGGAGG
G

SEQ ID NO:756: (Length of Sequence = 368 Nucleotides)

TGGCATGGTT GCATGTCCT GTAATCTCAG CTACTTGGAG GCTGAGGCAG GAGAATTGCT TGAACCTGGG AGGTGGAGTT
TGCAGTGAGC CAAGATGCA CCACTGCACT CTAGCCTGGG TGACCGAGCA AGATTCATTT TCAAAATAAA TAAATAAATA
AATGAGAAAA AAATATAGAT ATAGTAAAGG GAACAATTAC ATTCTACAT ATTTTAGCAG AAGTAAATAT GGTTTAATT
AATGGAACA GCTCTGCTCT AINGAAAATT CACAAATATT AAAAATAAAC ACACTCTACA TTAAACCTCT GAGCACTAGA
NGCTTACCTA CTTATTCATA GGGCTCACAT ACTGTAAGGG GGGTAAAT

SEQ ID NO:757: (Length of Sequence = 339 Nucleotides)

CTTCCACTGC CAGGTTATCG TCCCGGGAAG CCCCCACCC CCTCGNTTC CTCCTCCGCT TTCCCTAACC CGTCTCGGG
GGGCATCTAC GNCTCGTCT CGNCCTCTC CTNCTGAACT TCCCTTGTG CGTGGGCGT GGCGTCTGG TACTGCTGGT
ACTCGGACAC CAGGTGCTTC ATGTTGCTCT CGGCTCGGT GAACCTCATC TCGTCCATGC CTTNNCGT NTACCAGTGC
AGGAAGGCCT TTGNCGGAA CATGGCCGTG AACTGCTCGG AGATGCGCTT NAACAGNTCC TGGGATGGCC GTGCTGTTTC
CGATGAAGGT GGCCGACAT

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CAGCGTGCAC TGCAGGGAAA CGGTGGGTGG AGGGATAGGA AGGCCCTCAC GCTCCCAACC CACGGAGAAA NTGCAGATGG
 TGACAAGCTG CATCTGGACT CCAGGNTGTA TCTGACAAAG AGGGAGATGG TNCCTCCNT CCCTNCACC AGCTCCACTT
 TTNCTGCTGA AGAAACAGAG ATGTGGAGGC AGGCGTGACC T

SEQ ID NO:746: (Length of Sequence = 285 Nucleotides)

GIGTTTTTAT TTATACCTAC AAAAAGAAAA CAAGATGATG GTATCAAAAG GACAATTTAC AAATAAGAA TAGTAACATA
 GCTTTCAGCA TCCGTGTCCT GAACATCACA CATCTACAAG TCTTCAAGN CTTAATGCAA CAGGAATNTG TCTGGAGACC
 AGCAAGANCA TCAATAGAGA GCACTGNTCC CAAGCAAAAG CCACTAACCT TTTAGATGAG AAGTCCACAC AACGGATTNT
 TAGGGGAGGA TTTGGGNGAA GCAGCCCAT TGCCTTAATAC ATTGG

SEQ ID NO:747: (Length of Sequence = 302 Nucleotides)

CAATGCAGTT TTAGAGTGCT CATCTTTTCA ACTTATTTGA CAAATATTTA CTGAATGTCT GCCATAAGGC AGTAAAGGCA
 CAGAATGACT CAAAGCCTTT TINCCCTTAT GGGGTGTAAT TNCCTAGTGGT GGAGACAGAC AATGAGCAAG TAAACAATCA
 ATCGGCTAAT GATAACTACT GTGAAGAAAA TAAAGCAGGN CAAGGGAATA GAGTATGCCA TCATTAAGAC TGGTTAGGGA
 AAGCTTCTTT GAAGACATGG CAGCTATTGA AAACCTGACT GATACAAAGA AGCAAGTCAT GT

SEQ ID NO:748: (Length of Sequence = 346 Nucleotides)

GAGACCAGCC TGGGCAACAC ACTGAAACCC TCCTCTCTAA AAAGAAGAAA AAAATAAGAG TTTTGAGTTT TTCCAAAGAA
 GAATGCTCAG TACGTTTGIN ATCTATCAGA AAGAAGAATC TGGAGGTCTT GACGTGTAAA CAGAGTTGTG GGTACCATCT
 CACCAGAATT GCTGCCCTGA AGCCAAAGGA CTGAGCTGCT CAGATCTGGA AGTAATCTGA GCCCCCATTT CCAAGAAGAG
 AATTGCAGAA TTTTATAGGA AGAAGGGACC TGATCCCTGT CAATGGAAGC ATTTTAAAT TTTTAACTGA AGTCCAGGA
 GCATACAAA AGCCAGGNAA TTTACC

SEQ ID NO:749: (Length of Sequence = 325 Nucleotides)

CTAAACTTTA TTTTCAAAG CTTAAGGCC AAATACAAAC TGAGGTCTTC CTTCCTAACA AATTAATACT AAAATGAAAC
 AGCTTTTNTT GTGTCCTTAA GACAAATAA GGAAGGAAAA CGTAGCTGCA GTTGTCACG ATGGATATTG GTTCTTTTAA
 ATATATCTGA AAGTAGTAGT CAGAATGANT TATGGTTTGA AACTGAGGN ATCTTCTGGT TGCAGGTGCA AAGTGACTTT
 NNTTATCTT GTCTCAGTCT CCTTGATAGC CACTTCACTC TGCTACTACT CAACTTCTC CTAAAAATAC TTCATCTATT
 TTCAG

SEQ ID NO:750: (Length of Sequence = 341 Nucleotides)

TGTATTTTNA GTAGAGAAGG GGTTCGCCA AGTTGNCAG GCTGGTCTCG AACTCCTGAT CTCAGGAGAT CGGCTGCCT
 CGGCTCCCA AAATGCTGGG ATTATAGGCG TGACACTGTC TCTGGTTTAA GAGAACCATG GGCTGAGATA TTNAGGAATT
 CTCCAGGCCA CGAATCTTGG GGCATGCAGC CTCTCCGTA CCCACAGCA TCTNGGGAG CTGGTGTGCT GATGGGGTCA
 GCTCTCCAG CTGCTGGAA AATTCTCAGA CACTCCCTAA GAGGACATCT CCACCCCTNC CACTCTNAG TCACTGCTTT
 CTAACATTGC TCATTTGTTT G

SEQ ID NO:751: (Length of Sequence = 377 Nucleotides)

TTTTTTGAGA CGGAGCTTNG CTCTGTCACC CAGGCTGGAG TGCACTAAGC CCATCTCTGC TCACTGCAAG CTTACACCAT
 TCTCTGCCT CAGCTTCCA AGTAGCTGG ACCACAGATG CCGCCACCA TGCCCGGCTA ATTTTTTGTG TGTGTGTTTT
 TAGTAGAGAT GGGGTTTAC CATGTAGCC AGGATGGTCT GGCCCTCCAG CTTCCTCTGA GTCCCTTCAT AAACATTTGT

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GCGTAGTAT TTCCTTAAAT AACAGGTAC AATAGAAAGA TACTGCCTGG AAGTTATCCT TTTCATTTTG GTTCATTTTC
 AGTTTTTGTT TATGATTAC ATAGCTGTTT AATTCATTTG CTTATAGTAC AATCCTGCCA TAAAGTATTA AAGCACAAGA
 TACCTGTTAT TCCCTCAAC ATCTGCATTT TTCAAGNTT TTATACTCTA TATCCACAGT ATGTCAGCAG TTCCTGACTG

SEQ ID NO:740: (Length of Sequence = 374 Nucleotides)

ATCGTCAGAT TCACCAAGGT TGAAATGAAA TAAAAAATGG TAAGGGCAGC CAGACAGAAA GTTCAGGTTA CCCACAAAGG
 GAAGCCCATC AGACTAACAG CAGCTCTCTC GGCAGAAACC CTACAAGCCA GAAGAGAGTG GGAGCCAATA TTCAACATTC
 TTAAGAAAA GANTTTTCAA CCCAGANITT CATATTCAGC CAAACTAAGC TTCATAAGTG AAGGAGANAT AAAATCCTTT
 ACAGNCAAGC AAATGCTGAG GGATTCTGTC ACTNCCAGAC CTGCCTTACA AGAGGTCTG AAAGGANGCA CTAAACATGG
 AAAGGGNATA ACTGGTACCA GNCAGTCAA AAACATACCA AAATTGTAAA GGGA

SEQ ID NO:741: (Length of Sequence = 290 Nucleotides)

AATTATTTCA TAATAAGTGA ATAAACATTC ATGAACATAC CCTATCAAGC AAGAGCTAGA ACCTTGGCAA TCATTTCCCTT
 GACTCCTCCA GTTTGTGGCT ATCATGATAT TCAGCCCCAA GTTCATCATT TCTGTTTTIN CTCTATACA GGTTCTTAT
 ATGTATTTCT AAAAATCATT GGTATTTCA TCTTTGTAAA AAGTCATTGT NCTATTTTCC CCACTAGTTC TACATTGCAT
 TCATATTGTT GTGGGTGTG GTAATTCATT NATTTTGACT GCTGTATAAT

SEQ ID NO:742: (Length of Sequence = 274 Nucleotides)

TTAAGAGGAA AAGTATCTTT AGGAATTINT TTCTATAGAG TTCTTCATTA ACATTTATAC GAGTTTTTTG CTGAGTCAGA
 TGGACAGTTG GGTTCGTATG CTTTTCCTT CCGCCTGCC AGGCTGGCCC AGGCAGTGCT CCCACCANTC TATGAGOGTN
 TCCGGGGCCG NGGATCTGGG CAGCATCCAT GTGCGGGG CCACTCCCGAG CGGNACCACA AGGTNGCAGC GTTGTCCAC
 GAAANACCGN CTTTCGCTC TGCTTCCCCA AAGG

SEQ ID NO:743: (Length of Sequence = 398 Nucleotides)

TTGCTTTGCA GTTATCTGGA ACTCCTCGTG CTCTTTCAGG AGCTCCTGGG TGTGCTGTAT ACTGGAGCCC GTGGAGGTGT
 GGTGGAAAG GTAGAACTCG CCATTGTAT GGATCCATC CAAAGCCTGC TTGGCACTCC TCTCAAAGAC CAGTACTGC
 TGCACTGGT CCAGCGTCT CTCTCTCATG GTCCAGTAAT GCAATACCCT GTTCTCCCGT TGAAGAGTAT CATTCAGAT
 ATTTTTCAT TGCTGTTCAG GAGCTTTGAT GTGGTCAACC ATTCCTGGCA TGTTCAGCT TGTCTCTGTG CAGGTATTTCA
 AGGAAGACGT CTGCATINCT CCGAGCAAGN GGTCAAGCC TTCAGGAATG CCTCCTTINC TNCAGGTGC GGTTTTCA

SEQ ID NO:744: (Length of Sequence = 359 Nucleotides)

TGCGACAGAG TCTTGCACTG TCACCTGGGC TGGAGTGAG TGGTGCAATC TCAGCTCACT GCAACCTCTG CCTTCGGGT
 TCAAGCCATT CTCCTGCCTC AGCCTCCAG GTAGCTGGGA TTACAGGCAC CTGCCACCAT GCCAGCTAA CTTTTGTAT
 TGTTTTTTTT AGTAGAGATG GGGTTTCACT ATGTGGCCA GGCTGGTCTC AAACCTCTGA CCTCGTGATC TGTGGCCIN
 GGCCCCCAA AGTTCGGGA GTACAGGCT GAACCAACCN GNCCTGCTGG GCCTGCTTAT TTAAATCCC TAGAAGAGG
 GATTCINCA CTACACCACA CCTTAACTT NGAGGACC

SEQ ID NO:745: (Length of Sequence = 361 Nucleotides)

CCCTTAATTA AAAGTTTTAT TTTTAAAAA OGTAACAGAC CACTCTAAGA AACTTTGGCA TTCAAAGCAG TAGTACTGT
 TATTTGCTAA CTCTGAAAA AAAATTTTNC CCCTCACAAA CAACCGCAA ACTCCTGCCA CTTCCTAGCT TGGTGGCTGC

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TACCTAGCTA GCCCTCAACC TCTTTGTTTT ATGAATGGAA AGGCTGGGAC CCAGACAGGG CAAGTGACTC ACCCAGTGTG
ACAGAGCTGT TAAATGGCAG AGCATGATG AATCGGGCCA TGACTACTTT CCTACATGAC ATATTGAAAC CAGTTTGAGG
CCTCGGTTTC CTCTCTNGCA AACAGAGAT ACTAATG

SEQ ID NO:734: (Length of Sequence = 374 Nucleotides)

TGGTGAAAGA AGAGAAGGAA ACCTTGGTCT GCATGGCACT TGGTACTTTT GTATTGCCTC CATGCCCTCC ACTGCAGCTC
CTGCCCTGCT CTGTGTGCAT CCTCATGAG ACTCAAGACA GATAACCTCT CCTTGGCCTT TCATGTCCCA GCCCTGGNTC
TTGGACTCAA CCATCCATIG CATCCCCATG GAGGATTCTG CCAGTCTCA GGAATCAGGA GCAACCCAGG GATGTCCAG
GGTCACAGGA AGACTTGTG AGGGGACCA CAGGGGTGCC CACAAATTAT CAGTCCATGG AGAAAAGTAG AGAGGGAGGC
TCAAGGACCT CAGCACGTAA GGGACATTTT GAATTCTACA AGTCACGGTG GGAT

SEQ ID NO:735: (Length of Sequence = 348 Nucleotides)

CCCAGCGCT GGAGAGCCAG CCTGCAGGG TGGCTGGGC GAGCCAACT GCGTTCTCGG TGCAGGGCTT CGGGTCTCCC
TAACAGACCT TATACGCTGA CCGGCGGCG CCATGGCAGT GTCTCTTTC TCAGACATCC AGGACGACC ACATTGCTCC
AACAGCGGTC GCTCCACCAA TCCTGGGAGA AGGGAATCGT TTTCTCCGCG TGCCCTGTCA GCGGCTCATG GTGCCAGAG
AGGAATTTTA GTGGCAGCAT TCGGCTGTC ACGCCACCGA AATTGCCAGG NCACTCCAAG TCAGAAGGAC CACCAGGAAA
AGTCAGGAAG AGAACCACCC ATCAAGGT

SEQ ID NO:736: (Length of Sequence = Nucleotides)

ACACTCTGA CCTCAGCAA TCCTCCACC TCAGCCTCCC AAGTGCTGG GATTACAGGC ATGAGCCACT GCGCCAGCC
TACACACACT CTTAATAGAA GAAATGAATA ATCAAAAAAT ATTATTGTG GAAAAAATGT TTGAATCTTA TTTTAAAAAT
AATTACGNT TTCAATAGGC ATGTTGAACC TTTTTCGCG TACTGTTTC AGCAATTGCA GTTGAATGAG TACAAAATGC
ACCACAGAA AGAGACTGCT ATCTACCCAA ATATTGCTGG TTGTGAATC CATGGTAGGG AATTTCATG TATTGTTACA
ACCTGCTATA AATACATCCC AAAATATGTG TAGAGCTAAA ATAGATG

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SEQ ID NO:737: (Length of Sequence = 243 Nucleotides)

TTAATCATTC AAATTCATT TTATACAACG AGTGATACA CCACTGGGGG AGTNTCTGAC TGATGCGTGG GAGGGCGGGC
GGGGATGTCT NCAGCTATGA GTAGGGAGGA GCGGGGAAG CCTGGGTGC TTCCTCTCCT CGACTGACCG CTGTGTGTTT
GTCCCAGAG GAAGAGCGN NGCAGTCAG CCCGGGGGG GATGCCAN TGGAGAGAG GACCTGCAGA AGTGGTGGCC
AAG

SEQ ID NO:738: (Length of Sequence = 358 Nucleotides)

CGAGTCAGAG CTGGACAGCG GCGATGCCAT CTTTACATGG CCAGACCGAG AGAAGGGCAA ACTCTGCAT GGTGAGAATG
GCTCTGTACC CAACGGGCG AGCCCTCTNA AGGCCAGGAG CCGCGGGAG GAGATCCTGT AGCCACCTGG TCTGTCTCCT
CAGGGCAGGG CCCAGCACAC TNCCTGGCCA GTCTCTCTAC CTCCCGAGTN TGCGGGCAGC TNCGTGCCA GCATCTGCTG
GTCATTTGCG CCTGACAGTC CCAACAGAA CCCCTNGGA CTTGAATCCA GAGANGTCT CCAGGNAACC CCTCAACGAA
GCTGTGAAAT GAAGAGGTTT CTTCTTTAAA ACTGGTTT

SEQ ID NO:739: (Length of Sequence = 400 Nucleotides)

CATTTCTGGC CAGGCACGGT GGTCATGCC TGTAAATCCCA GCATTTTGG AGGCCAGGC AGGCGGATCA CGAGGTCAGG
AGATGGTCTA GACCATCTG GCTAACACAG TGAAACCTG TCTCTACTAA AAATACAAA AATTAGCTGG GCGTGGTGGC

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CCTTTAAGC AGCGGATCCC CTGGTCCCCA CCCCCAATT TATATTCATT AGGCCTGAGG TGGGGCCTGG GAATCTGGAT
 TTATAAATG CTCCCCIATG ATTCCAATGC CAGTGGGTTT TAGACCACAT TTGAGAAAC AGTGCIGTAA ACTGTTTTCC
 ATTTGCAGTG AAGGAAAATG TAGGGTTTGT GTCTGAAAC TATGCAGAGA AATTGAATAG TATTINAGTC TAATCTTGCT
 TTTAAATAAC ACGGAAATTT TGAAAGTCGG CTTTAGGGAG TTCCAGAACC TGTCATGAA CAGCAACAAG AAAGATCCCN
 GTGTGAAAT GAACACTGGT TGGTAAAA

SEQ ID NO:728: (Length of Sequence = 305 Nucleotides)

TGTTTATTA TAATCTTATA CAGTCTACAT AAATTTGAAC TTGTATTTAT TTGGGTTTCA TTATAACATA GCATAATAAA
 AATCALAGCA CTGGTCTCT GAAATAAAGC AGGCAATCAC CATTCAATAA ACACACTTGA TTTATTTTGT ATAAAAGGGT
 TAAGTTTACA ACTAACTTT TATAAANGT TTAGCATGAA TAAGTACATC ATTACACTTT TGAATGCAGA AATAGACATC
 TCTGCCACTA TACAAGAAAA CTCTAATTAA AGAGTTTACA AGGTTTCACT CAAATAGATA TATTT

SEQ ID NO:729: (Length of Sequence = 383 Nucleotides)

CAGACATTT ATTTTCTAT TTTCCATGAA GAAGGAGAGG GACAATTTTA GATTCACCAG TGTGCAGGAC AAATCTTAC
 TTAACCTATA GAGGAGCAAA CTTTCTTCAA ACACATTACC AATACAATTG TAATACTAAG AATCAATACC ATAGTTCTCG
 ATGTAGCATG ACTACAAATT GTCACAGTAG ATTTTGGATG ACTTTACCAT AGCCACACTT AATGAATTAT TATTINATTT
 NCTATTGTGA CTMTAATAAA ACTATATTTT AAACTTTAAA ATTGTCATTT AAATTACTAA AGAAAATGAG TAGTTCOCAT
 AATGAATCCA TAATGTTANG AATTTGCTTT AGCAAATGAG GACTATATTC ACCTANGCTT TTG

SEQ ID NO:730: (Length of Sequence = 311 Nucleotides)

CTCTTTTAT CCCTTAACCTG CTTAACAAAA GAAAGAGTCT CCAAAGTTTA AAAAACTTT GAAAAATATA CAGCTTGATA
 TTATTACAT AAAATATGAN TCCAGGTTCC AATATCAAAC AAACATGCT ATGTCAGAAA CACAGTGGAA GGCAGGAACG
 TAACCTACTG CCTTTAGAT GCAAAGACTA ATAGACACGT TCTCCNATCT CGACTATCTT NGTTACCTGT TATCCTCANA
 ACATAATTA TTANGGCACC TGNGAGGTG GATGACTACC GAAAATGGNC TTCATACCTT CTGTATGATT A

SEQ ID NO:731: (Length of Sequence = 349 Nucleotides)

AGGGAATGC ACAGAATTCT ACTAAAATA CAGCAAAATA AGAGAGCATG AATTACATAT CAAATTATTT AAAGCAAATA
 AATTACAAA TTTCTGGAAC AGACAGAAAG CAGATGAGTC TACCAAGAAG GATAATAAAC AATGACACCA GAGAAAAACC
 ACAACCTGAA AACTTAAGAA AACTGCCATA GAGGTGTGAG CCAGAGCTCC CAGGAGCCCT ACAGTGCTCC AAGCTCAGAA
 CTGGCAGTA TCAAAGTCAA GAATGCTATG GGGTAGCTAG GCCTCTTGAC TTCTCTTCT CTCTCCATTC ATAGACAAGA
 AAGCAATCT ACCTTAGGT GGCCTAGAA

SEQ ID NO:732: (Length of Sequence = 370 Nucleotides)

AAATTGTGTC CTCTAGCCTA GAAGCAATCA AACTCCAACCT GGTCGTCTG ACTGANCTAC GCATGGATAC GCCATTCTTC
 TGAGGACCT TAGACCAACC CCAGGAGGAG CCCTGACTTC TGTTCCTCAT TTATGCCCC TTTTCAAGCA GGAAGTAGCC
 AGAAAAGTC ATTGCCCAA ACCACCTAAC AGCAGTTGGG GTGACGTCTC CACAGGGGGG AAATGTTATA GGAGTTATTA
 AGAAAATATC TTAGGCAGAT AGAGAGCAA AGGGGTCTCT GGGAAATTTT TGTTCTTTT AAAGTAGCTG CAGAAATGTT
 TCTGTCTAG CAGGAAAAGC CCCAGCTCTT TAAAGCTGGG GCCAGCAATC

SEQ ID NO:733: (Length of Sequence = 357 Nucleotides)

TTTTTGGTG GTAGAGACA AGGTCTTGT ATGTACTAA GGCTAGAGAT CCTTTAAAA TGTCCTTCTG CTAGGTTGTT
 GGGCCATCAC CTCTCCTTG TTTCTTCTC CTCTCCAGC TTCTCTGGAT TCCATCTGTT TCTTATACTG AGAAGTTTGC

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AAAAGATTG AACAGATAAT TCATCCAAAA AAAATATGGG TGGGAAAAAA AGCACATGAA AAGATGCTCA ATATCATTAG
 ACATTAGAA AATATAAATT AAAACCACAA TGCAATATCA CCTCGTATCT ATTAGAATGT CTAATATTAG CAAGACTGGC
 CATATAGAGT GTTGGTGAGG ATGTGAACAA CTGAAACTCA TACACAGTGC AGGTGGAAAT GTAAATGATA CAATTTTTTT
 GGAAAAGAGT TGGCTGTTTC TTCAAAGTT AAACATTACA TCTGCCATAT GNTCCAGACA TTCCACTCCT AAG

SEQ ID NO:722: (Length of Sequence = 266 Nucleotides)

ATCGTGCCAC TGCAGTGCAG CCTGGGCGAC AGAGGAAGAC GCCATCTCAA AAACAGAAAA AAAAAAAAAA AAAAAAAAAA
 AGTGCAGCTC TCTAATGGG CTCTTTTACT TACTATTTAT ATAATAAAG CCAAGTTCTT AGGCTGTATA ATGGGGTTAA
 TCATAGTAAG TACCTTGTA AGTTACTGTG ATAACCAAAT AAGTGANCAT AAGTAAAGCA TTTTACATGT GTGCAGCTTA
 ATAAGTTGGA GTTGTGACTA TTATTT

SEQ ID NO:723: (Length of Sequence = 370 Nucleotides)

ATTATTTCATG AAATAATCCA TGTAACATCA CTTAGCACTG AGAGTTAACA AAGGCAAATG TTACCTGAAT AGGAGGAAAC
 AGAGGAAGAA CAACGAGGTC TCTTTTATCT ATGCTAAGCT TTGCTGAAT AGGAGAGAAA TGTGTGGCCT GTTGGTGAAT
 TTATGTCTTT GTGGTAGTAA TGGATTTTCC TAAAGCTGTT TCCCTCTGAT CATTAAATAT CCCTGTACAG CAAAGGACTA
 TTGCTCTTGT GTATGAGTAA ATAACCTGTG TGAAGCACC GCTTATCTTC AGACCACAGC GCATACTTCT TACTGGAAAA
 TATAATGCAG GTGCCAACAC CCAAGGGCA TGACCAGGGG TTCCCTTCC

SEQ ID NO:724: (Length of Sequence = 478 Nucleotides)

GGACACAAC GAAGTGTGGA AGAAATGAAA GGGCGAAGGT GTGTTTGTAG AAGGCTCTGG AAGAAAAGCC CAACAACCCA
 GAATTTCTCT CTGGACTGGC AATTGCGATG TACCATCTGG ATAATCACCC AGAGAAACAG TTCTCTACTG ATGTTTTGAA
 GCAGGCCATT GAGCTGAGTC CTGATAACCA ATACGTCAAG GTTCTCTTGG GCTGAACT GCAGAAGATG AATAAGAAG
 CTGAAGGAGA GCAGTTTGTG GAAGAAGCTT TGGAAAAGTC TCCTTGCCAA ACAGATGTCC TCCGCACTGC AGCCAAATTT
 TACAGAAGAA AAGGTGACCT AGACAAAGCT ATTGAAGTGT TTCAACGGGG TGTGGAAT CCACACCAA CCAATGGCTA
 CCTCTATCAC CAGATTGGGG TGCTGCTACA AGGCAAAAGT AAGGCCAAT GCAGANTACA GGGGATCTG AAGCTAGT

SEQ ID NO:725: (Length of Sequence = 356 Nucleotides)

GACAGAGGAG AATAAATGGA ATAACCTAGT TTGTGAAAG ACTCACAGTA TCACTTGGTT TCTGGACACG GTTCGAGACC
 TGGCTGTGGC TTGCTGTGGC CTGAGAGCC ATCCACAGC AGCAATGCTG TTGGACCTT TGGCTGGGAC CTTCAGGACC
 CCCTGCAACA GCACGTGTG CTAACCTGC TGGCATGATG CCCCTTNTT GACAGGGCTG CATACAAGGC CAGGACAAG
 TGGCAGGCAG TGACCCAGC CTGATTTGC TGAGGGCACA CGCCATGCTT CTTGCAGTGC CAGTGTCTT CTNGGTCCAC
 TTTGCAGCAA GGATAGATGT GGTCTAGAT CCAAGA

SEQ ID NO:726: (Length of Sequence = 387 Nucleotides)

GTGGTAGAGT AAATCCTATT ATATCGAGAT ATGGTCAGG CAAGAATTTT NCTTTTAAAA TAATTTATTG TAAATGAACC
 ATAAATTTT NACCTTTGTG CCATCTTCTA GGCTATAAAA TAGTCTTATA AAGAATCAGA TTGTTAAGAG TATATGAAAT
 GTGGATATGG ATGTGGAAGA TCCATAACGA GGATGATGAA AGCACATTAA GAAGCTTCTT GATGGGTACA AAAAATAGAA
 TGAAGAAGAT CTAGTATTG AGAGCACAAC AGGGTGAATA TAGTCAACAA TAATTTATTG TGCAATTTCA CATAACTAAA
 AAGTATAATT GGGATTGTAA CAGAAAGGAT AACTGCTTTG AGGTGATGG ATACCCCATT TTACCCC

SEQ ID NO:727: (Length of Sequence = 348 Nucleotides)

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CAGTAAATCT CTTACATCCT TCCCAAAAAT CAGTGTCTAG GGACTAGTTG ATCTGGATGA GTTATACATG ATATTGACT
 TTNCATAAGT AGTGGGAAGT TTCACTAAGT AAAGATCTGA GTTCTTGGT ATCTGACGTT TGTATACAGA TGGTGTCCAT
 TTGCTCAACC AGACAGGAGT TAACCTGTAT TAGAATTGTT TTINCTAAAG TNATGTTACC TGAGAAATTA AGGACTGCAC
 CTGGTTTAAT GTTGCTTCAC TTATCCACC CTACAGAGAC CAGCAAGGTT CTGCCAGGOC TCGAGCATCC AAGCATGATT
 TTCCTGTGAC AAAATCTAAA AATCCAACC

SEQ ID NO:715: (Length of Sequence = 302 Nucleotides)

ATATTGAAA AGATCTTCAC CAAAGATATA TGGATAGTAA GTAAATATAT GAAAGGTTTT CACTGTTAAT GATTAAAGGA
 AATGCAATCT TGTACATGAA TGTTTATAAC AGCATCATT ATAAGAGCCA AAAGGTAGAA ACAATCCAAA TGTTCATCAA
 CTGATGAATG ANTACACAAA ACATAGTATT ATCTATATAA TGGAATATTA CTTGGCCATA AAAAGAAATG AACTGGGCCA
 GCGCAATGA CTTACGCCCTG TAATCCAGC ACTTTGGGAG GCTNAGGTGG GCGGACTGCT TT

SEQ ID NO:716: (Length of Sequence = 314 Nucleotides)

GTATTTTITAG TAGAGACGGG GTTTCACCGT GTTAGCCAGG ATGGTCTTGA TCTCCCTACC TCGTGATCCG CCCACCTGGG
 CCTCCCAAAG TGCTGGGATT ACAGGCGTGA GCACCTGCGC CCCACCCCAT TTTGGTGIGA TCTCAGCTCA CTGCAACCTA
 CCCCTCCCAA GTTCAAGTGA TTCTCCTACC TCAGCCTNNT GAGTAGCTGG GATTACAGGG GTCTGCCACC ACGNCTGGCT
 GATTTTCCTA TTTINAGTTG AACTGCATT TCACCAGGNT GGCCAGGCTG GTCTCGATCT CCCTGACAAG AGGG

SEQ ID NO:717: (Length of Sequence = 279 Nucleotides)

ATAAAAATGC TACAGATTTT TGTATGTGA TTTTITATCA TGCAATTTCA CTGAATTTGT TTTTCAGTTA TAACAGTTTT
 CTTATGGAGT CTTTGGTTTT TNCCAAATAC AAGATCATAT CATCTGCAAT CAAGGATAAT TTGACTTCCT CCTTTCCAAT
 TTAGATGTCC ATTATTTTTT CTCTGTCTG ATTGCTCTAG CTAGGATTTT CAGTACTATG TTGAATAACA ATGGTGAAAG
 TGGGTATCCT TGTATATTC CAGGGTCTTG GAGGAAAGG

SEQ ID NO:718: (Length of Sequence = 161 Nucleotides)

AAGAAAAAAA CATAAATAAT ATTAGAAATG GAAAAGTTAT AAATCAACTA CAGCAAGGNT TTAAACTAT TATGAAACAA
 ACCAAGTAGA AAGTAGATCT GCCAAACAAA AAAGGAAAGA NACTGTTTCT TTCATAAATA ANTGACAATG GGGGAAAAAG
 A

SEQ ID NO:719: (Length of Sequence = 220 Nucleotides)

GACAGAATTT TTTTITTTTT TTTTITTTGA GACAGAATCT CGCTCTGTCA CCCAGGCTAG AGTGCAATGG CGCAATCTCG
 GCTCACTTCA ACCTCTGCTG TCACAAATAA ACATCAGTAA GAGCCAGCAG TTGCTCTAGG ATCTCAGTCA GCAAGCTTGG
 GGGCTGTGAG GAAACCAGCA GTCACCTGTT TCTCCCTCTC CCAGCCAGG GCTGACCCCT

SEQ ID NO:720: (Length of Sequence = 347 Nucleotides)

AGAAATGAAA GCTACATTAA CGAAAAAGGA ACTTAGGAAT GAGGTCAATTA AATATAACTA ACTACATTTT AAATACGGAT
 ATCATATATT TCCTGATTAG TATCAGGTAA ATATCTAGAC TCCTATCTTG AATTCCGGTC TCAGATAAAA AGGTCAGAGA
 CAATTACAAG GAAGATGCTT CATATTATCA GGTCAGTATA TACCTAATTA TGTGCACTGG AGAGTAATTT ATTCTTCATT
 ATCAITTTGTA AACATTTGTT TTTACATTT TTGTAGTTGT CCATAATGTA AGCTTGTGGG TTTGATTATT GTTTTCCACA
 CTGGATCCAG CTGGTTTAAA CCTATTT

SEQ ID NO:721: (Length of Sequence = 313 Nucleotides)

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ATACCTAGAA ATTTTGATAA ATACTTGTTA AACAAACAAA AATAAACAT CCACAGCAAG GANTCGACTA TAAGGCGTTG
GTGG

SEQ ID NO:708: (Length of Sequence = 325 Nucleotides)

GGGCTCATAC ACAGTTTTAT TTCTGTGA TTTTACAGAC ACTCCATCCT GCAAGCCCAT TCCCTTGGAA AACCCAGAAA
GAGTGGGCAC AGTGCTCCCT AGAGGAATAG AGGGGACAAG ATGGCTGCCA GGGAGAGGC AGTTAGGGCA CTTAGGGATT
TACTCCGCC CTGATGGAAG ATCTGGTGCC CAGGGTAGGG GGAGAGGGCC TGGGCTGGGC TGGAGCCTCC TAGGTATTTT
CCAGAAGCCC CTTAGGAAC TGTCACCTGG ACTCCAGCAC CACCCCTCGT CATGTTGTCA CTCTCTGTGG TGGCGGAGC
GCAGG

SEQ ID NO:709: (Length of Sequence = 264 Nucleotides)

GGCCCCGTT GCATGAGGCA CTTTGTCAA ATGAGCAGAT ACGTATGAGC ACTGAACTCT TGAGTGAATC AACCAGAACT
AAGACCCAGA TCCACGCACT CAGGAACCTG CTCTGAATTT CAGTTTGACA ACAGAGAAGT AGAATATTTT TAATTAGCTA
ATATATATAC ACATTTTTTA ATCATCCAAA ATTACAGGCA AATCACTTAA GGTCCCCAGC ACTTTACGNT GNAAGGTCAG
AGAGANCCCC ACAAAAAGG TGTT

SEQ ID NO:710: (Length of Sequence = 366 Nucleotides)

ATTTTTATTA TATACATATC AGTACTCACA ATACGTGCT TATTTAAGAT GGCTGTTTTAT AAGTATAAAG CAGTTTGAGC
AACACTGATT GTGCATTATT GTACTTCAGA TGAAAAATCC TTACATGCGG AATCAATGTC TTTTAAAATT TCAGATAAAG
AATTINCATT TGAGGNGACA TACAATTGTA AGTGCTCATT TTTTGTCAAT TTTAAGACAC CATTATGTGT AAGANGGATT
AATTINCCA TAAATTACA AACACCTCC ATGTCCTGAC ATTCACATGG AAAGGGCAGC ATAACCATTT AATCATCCAA
ATGCATATCA GAGCAAACTC CTAGGCGCTT TAGGTGTGAG GTTGGA

SEQ ID NO:711: (Length of Sequence = 216 Nucleotides)

GAAAAGCAGA AAAAGTGGG GAAGATTTT TATCTGAAC TTGTGAGCTG GAGAATTACC ATTAGTAGCC CACTAATAGG
TTATGGCCGA TGAGTCCCT CATAACACAC TGAGAGCCAC TTTTGACACT CCCAGAAAAG GCAGGTTAAC AAAACCCCTT
GATGGAAGCT TAGACCCTCA TTGCCAGTG TACCAAGCC TCCTTGAACC TTGCCT

SEQ ID NO:712: (Length of Sequence = 276 Nucleotides)

ATTTTTTCC CATAGCACGT ATCCTCTCT CATGTGTAC CTGCTACACT AGAATTATGA CCCCTAAGAG GGAAGAGACT
ATGTCAGTAT CATGATTCT NATTAACACC ATTATTTAGA ACCATGCTTG GCTTAAAGTA GTAGCTGCTC AGTAAATATT
TATCTATGTG TGAATTTTTA AGINCTTCCT TTATATTGAN TTAAATTAG TCCTTGTGT GCAGCAGTCT GGGTTTGTCT
TATGTTGAAA TACTTATGTA GACTTCTACA TACATT

SEQ ID NO:713: (Length of Sequence = 354 Nucleotides)

AACTTTTACA ACCTGCACAT TTGTTATGCA TACTAAATGG TGTTTAAAA TTAGGGTTTC TTTGCCTCTC TACACTACAC
TAATCTGCCT AAAGTGGTT GTTTCATATT TATAATGCTA ATTATCATAC CTACCTACTT TAAATTTTAG GTAGAAAATT
ATCTGATTTA AATACAAACA TATTTTCTC ACATTGAGTA ATATGCATAA TGTAGTTCCA AATGTATTTT ATTACTATAG
TCACAATATC CAACTAAAA TTACGCTATC TAGAATTGTA CCANCCAAAA TCTCGTATTG GCAGATCTTG ACAGGCTGGA
CTGCAAGNA TGTGGCTTGG AATTTTAAAC CCAT

SEQ ID NO:714: (Length of Sequence = 349 Nucleotides)

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TGTAACCTCC ACCTACTAGT AACTGAAAAC ACGCATGTGG GAACATTGCA CAGATGGATA GATGCAGAGA TGAAAGAAGG
 AAAGCTAAAA TATTNCCAC GTGAAAACCA TGCACTCTGT TCAGAACTA ATTCTGCCCT CACGCCCTCC AGGAGCATGG
 GAGGGGTGTC GTCCGTGNCC TTTTGTGGAT GAGGGGGACC ACATGGTATT TCTACTGAAA GAGTTTTT

SEQ ID NO:702: (Length of Sequence = 397 Nucleotides)

CATCAAAAA AAAAGGAGCT AACTAGATGC TGTCAATAAG AGACTCACTT TAGATCTAGA GACACAGGTT CAATGTAAAG
 GGATGGAAAA ACATATTCCC TGTGGAAATC CCAATGAGGG TGCTATGGTT TTGCATGTGG TTTGTCCCCA CCAAACTCA
 TGTTTAAATT TAATTGCCAA TGTAAATGGT CTGGGAGCCT GGGCCTTAAG AGATAAATAA GATGGATTAA TGCTTTTCCC
 ATGAGACTGG GTTAGTCGAG ACTCTTGCAA AAGCATGTTG TCGTTAAGTG GGTATCCTC CTTTGTCCCT TCTCTTTTAT
 ATACACTTCT TTCCCTTCT ACTTTTCCAC CCTATTATGG AAGCACCGTG AAGCCCTCAC CAGATGCCAC CACCATG

SEQ ID NO:703: (Length of Sequence = 374 Nucleotides)

ATACAGGGTT AGACCAAGA GGAATTCAA TGAGGCCTGA TGGATTATG GACCAGAACA ACAGAGGGGT CTTGAAGGAA
 GGAAGATATA GAAAAGGCAA GGTTGTGGTT AGAGAGGAAA TCCCAGAGTT TTAGCTCTGG GAGGTGTAAT AATTTCAAAA
 GAATAAGTCC AGGCCTGGCC ATGACATGGG AAGCTGAATC TCTGCAATGT TTTTCAAAT AGCATAATGG ATATCTTTGA
 CTCCTACCT GAAGCCAGAA AATATTAAAC TTGCATGTAT AATCATACAA ATGTATGCAT ACCTATTTAT ACATACATTT
 ACATATTTTA TACTTATGCT TTCATATATT CTACGTGAGG TACAATATAC TCCA

SEQ ID NO:704: (Length of Sequence = 422 Nucleotides)

GGCAATGACA TAGAGATGAT AAGAAACAAC ATGGTTTGGT AGAGGGAACA TTGATTTAG ACTCTGCCCA TTTTLAGCTG
 TATGACTTAC ATAAGTCATT TTGTGTCCAA GCTCATTTT CTCCCATATG AAAAGTGAAG GGGTTGGATT AAATGACTAA
 AATCCCCTTC CAGCCCTATG AGCCCAATGT ATTATGATCT CTGCTTTGTT TCCTTCTTAA GAGGCTTCCT ACTATAAAT
 GTGACCTATT TACATTTTAA GTTGAAGTAG CCCACAATAA TGAATAATCA NTTTAGATTT TCCTCATCTC CTTTGGGAGA
 AATTAAATTC AAGCCTCTAT TCATTTGATG TTTTACAACA AGCTTCAAAG TTGGGCCATG GTTCATTCAC AGTTTTGATA
 TTTTGAGGAC ACCAATAAAA AG

SEQ ID NO:705: (Length of Sequence = 229 Nucleotides)

GCTGCGGNTC ATAACAGCTG GACTCACGCC GNTGACAGAG TCTTGATCAG TCCTCTGGGA ACTAGACGTC AGGCTCACAC
 CACTGTCGTC GCTGATCTGG GNCCTTTTCT CCTCTGTCTC ACCAAGGTCA AAGACAGGTT TGATTACTTC AGGCCTCTGT
 TTTTCCAAAG NTTTTGCTT TNNCACTTCC TGGTGCTTGT TCCACAATTC AATAGATGCT ATAAATTT

SEQ ID NO:706: (Length of Sequence = 255 Nucleotides)

GAGGACTGTN TACCTCAGTC CTCTCTCTAA ACTCCTCAGC CTCCCAACAG GGGCCTCCTC ACCTGGGTTT TGAGTGTGTA
 CCCCTTTTAG AGAGTGAGAT GCCACCCGGG CAGCACTCGT TAAAGCTGGC CAGCACGAGT GACTAAGGGG AGAGAGCATG
 ACATAGACCT GGGTGGCAAC GGGGACCTCT GGAAGCAGGT GGGAGTAACA NAGGAGAGGG CAGTNGAGGG TAGAGGAAAA
 GGACCTCCAG AGGTT

SEQ ID NO:707: (Length of Sequence = 324 Nucleotides)

CCGNGAGTGT GCCACTGCAC TCCACCTTGG TGACAGAGTG AGACTCOGTC TCCAAAAACA AAAAAACAA AGTTGAACTA
 TAAACTGAAT TCCTCCCAAG GTTAGTTTCA CCIATGCCCT GGAATGAACA AGGACAGCTT GGAGGTTAGA AGCAAGATGG
 NGTCAGGCCA GATCTCTTTC ACTGTTAACA TTTTCTCAGT TATAATTTT GCAAATGTGG TTTTCTCCC TGCATCCATA

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CACTGTGACG GATGAGTGGG TATTTCTTTG TACCTGAGC TCTTTCATCC TACCTTGGTG GTCAAATGTG AGAGCAAGTG
 CTTTGGGGCT CAGAGGGCAT CACTCCAAGC ATTCTGCTG GAGTCTGTG TGGTGAATGT NCTTGCTGGC ATCTTGATCA
 AGGACTTTGT CATCATTAGC CATCAAATGC TTGTTGGTCC TTCTCAACC TGTAATGTTG ATACTTAAAA AACTGGAAAC
 ATCCTGACAG AAACAGTCGA GAAAGTGGTT GTGTGAGCTC TGGTTATCGC ATTACAGTTA AAGTTGGCAG ATAGGTTCTG
 TATTCAGTGC CCCATCAAAA ACAG

SEQ ID NO:696: (Length of Sequence = 324 Nucleotides)

CTTGAACGTG GCAGATAAGC ATTTTGATAT GCTGCTGGAT TCAGTTTGCC AGTATTTTAT TGAGCATTTC ACATCGATGT
 TCATCAGGGA TATTGGCCTG AAATTTTGTG GTTGTGTGTG TATCTCTGCT AGGTTTGGT ATCAGGATGA TGCTGGCCTC
 ATATAATGAC TTAGGGAGGA GTCCCTCTTT TNCTATGTG TGAATAGTT TCAGAAGGAA TGTTACCAGC TCTTCTTTGT
 ACCTCTGGTA GAATTTGGCT GTGAATCCAA TAGACACAAT AAAAAAATGA TAAATGGGAT ATCACCCTG ACCTCAGAGG
 AAAT

SEQ ID NO:697: (Length of Sequence = 341 Nucleotides)

AATTAATCAA TCAGCCATTT TGGTGGCCGA AATTTATAAG GCAAGTAATA CTTTATGTTT CTTTGATAGA CACCATGATC
 AGAAACATAG TCTCTTCTT AAAGGGAAAA TAGGAAGTCT TCTGAGTCAT AACAGATGCA TGCATAAAIT TCTCTGAGTC
 TTCATAAGAA ACACAAGCAA GATTTACAG AGGCAGTGA ATTTGAACTG AGTCTTGAGA AATAAGCAAT ATCTGAACAT
 GTAGAATGCA AAATAAGGA TAAGCAAGTG CTAATGCCA GAGGGTAAAT ACATATTAA TANCCANTAA CCAATTGCTA
 CTTGTGTTTC TTACTACTAGA A

SEQ ID NO:698: (Length of Sequence = 317 Nucleotides)

GCAAACCAGG AGAAGCAGAA GAGCAGGGTA AACCTGGGT ATAATTGTC TAGACCCCCA TGCTCCTTT AGTCTGAGTT
 CTGACATAAT TAAGTGTCTA TGAGATGTAC TGGGCTTTC CTCTGCTT TTGATGCCA CCTCACTAAT GTAAACAAAA
 CATTCATTTT TTCATCCTAT TTTTCTTAC AGCTGCTTAG CACAGTCTT ATGAAAAAAT GAAGCCTTGA AAATGGTATA
 TCCTCTGAC AAAGCTAAGC CTGACAAGTT GGCTGCATTA CCTAGGAATT AGAGAAGAGC AAGGGCAGAT GGTGGGG

SEQ ID NO:699: (Length of Sequence = 385 Nucleotides)

ACCAGGAGAT GGAGGTGCTC TAGACTGTGA TGCTGGGAAA GGATTGTGGG CTAGAAAAAG GGCTCCCTAG GGCCGGCATA
 TGGGCCACTG GGTGAAGAG GGGCTCTGAG ACCCTCACC TGGAGCAGG CATCACCCAC ACCGAAGAAT GAAGCGTGAA
 TTCGGTCACG CTTAAATGT TGAATTGTG GCAAAAGCCC AAGTTAATGA AATAGCATGG AAAATGGATG TGATGAGATT
 TTTGAATTGT AATTAGATTA ACATTGTAC TAGTTATCAG TCTGATATAT CTTATAAATC AAACGTTGGG TTGATTTATC
 TTTTATCACT TCTAGGNT TACTCCTAAC AGTAACTCAC AAACCCAGCC CCAAATCAGA GGCTT

SEQ ID NO:700: (Length of Sequence = 315 Nucleotides)

ATCAGTTGGA TTTGCAGAGG ATTGGAAGGC AGCACCAGGC AGGCTCAGAC TCACTGCTGA CAGGAATGGC TTTCTTTAGG
 ATGAAAGAGT TGTTTGTGA GGACAGCAIT GATGATGCCA AGTACTGTGG GCGGCTCTAT GGCTTAGGCA CAGGAGTGGC
 CCANAAGCAG AATGAGGATG TGGACTCTNC CCANGAGAAG ATGAGCATCC TGGCGNTTAT CANCAACATG CAGCAGTGAT
 GGCGCCAGGC TCTCAGGNT GGGCCTGATC CCNCAAGTGT GCTTACTNIG CTGACTGTGT ACTTATCTTC CCCAA

SEQ ID NO:701: (Length of Sequence = 387 Nucleotides)

GGCAGGAGAA TCGCTTGGG CCGGAGGCA GAGGTTGCAG TGAGCCAAGA TCGTGCCACT GCACTCCATC CTGGGCAACA
 GAGCGAGAGT CTGTCTCAA AATAAAAAAT AAAAAAATAA GGTAGGTCTT TTCATCATTG TGTTTCTAG CATGTAGCAC

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SEQ ID NO:689: (Length of Sequence = 315 Nucleotides)

GATTTAAGTG TTAGCATTTC TAAACTTGAG ACTCTAACAG TAAAAATAAA GTAATCTGAA ACCTGTTTCC ATGGGTAAAA
CACTCTGCCT GGTATTCTTG TACACAAAAT TTAATAATA TGTGAATATC ATAAAATGAA AATATCACTC CCTTCAATTT
CTTGGCCCTT CACAAATTCA ATGTGACTAT GATCCTTTTC AATAATACIT TCAATGACAT TGTGCTTCTT TAGAAAAATC
ACTTAAGTTG TAGCATACAA TAGTTAACAT TAGTCCTTTT ATTGCTATGG TATATGCTAA TTTTTTTAAA AGGGG

SEQ ID NO:690: (Length of Sequence = 291 Nucleotides)

TTAAAATACT CCATATATTT NAGAAGCAAT TGAAAATGCA TCCATGTATG TNATTIGAGC GTTACTAGAA ATTTATTTAT
ACAAATCCAT ATTAATGTGC TAATAAGTGA CAAATATATA TATAGTCATG CACTGAATAA TGATGTTTTG GTCAACGATG
AACTGCACAT ACAATGGTGG CCCATAAGA TTAATAATAGA NCCAAATTT CCTATGGCCT AGTGATGCTG TAGCCATCAT
AATGTGGTAG TGCAACCCAT TACCTTTTCT ATGTTTAAAT ATACAAATAC T

SEQ ID NO:691: (Length of Sequence = 451 Nucleotides)

TTGAGCATCC GGAATATGGA GAAGTAATTC AGCTACAGGG TGACCAACGC AAGAACATAT GCCAGTNCCT CGTAGAGATT
GGACTGGCTA AGGACGATCA GCTGAAGGIT CATGGGTTTT AAGTGCTTGT GGCTCACTGA AGCTTAAGTG AGGATTTCTT
TGCAATGAGT AGAATTTCCC TTCTCTCCCT TGTACACAGT TTA AAAACCT CACAGCTTGT ATAATGTAC CATTGTTGGGT
CCGCTTTTAA CTGGACTAG TGTAACCTCT TCATGCAATA AACTGAAAAG AGCCATGCTG TCTAGTCTTG AAGTCCCTCA
TTTAAACAGA GGTCAAGCAA TAGGOGCCTG GCAGTGTCAG GCCTGAAACC AAGCAATACC GTCATGTTTC AGCCAAGCCC
AGAGNCCTAA GGTTTACAAA CAAACTATGG NCCGGAACCT CCTCAAGTTC T

SEQ ID NO:692: (Length of Sequence = 363 Nucleotides)

GATTTTNTGA TTATTGATAT TAGAAATGTT TAAAATTAAG ATATTAACAT TTCATGAAGC TGAGTGGTGA GCACACCAGT
TTTATATTCT CTCATATAA CTTTGTGTAT ATTGAAATG TTTTCTCATA AAAAGTATTT AAGCAAGTTT AGGAAAGAAT
ATTGATAAAT GAAATCTAGA GACCATCAAA AGCCAATTTT ACCATCACAA AGTATAATTG TGTTTCAAAT ATAATTGAAA
TTGTGTGACT GTTGCATATT CTTTTTTTIG TTGTTGTAA TGAAAGCATC TTAAACAGTT GCCTTTCAA GCTGTTATCT
TTGATANTAA CATACATTAA CCTAACATTG TGGACTTCTG TTA

SEQ ID NO:693: (Length of Sequence = 269 Nucleotides)

TTAAGGGTCC CAAGACTGCT CTAACAACAA CACCCATTTT CATAAATATG GNTCAATAAA CACTTATTCA TTCTTTATAA
TTAGACTCTA TTGTTAGAAT TGTTTTAGGT TTATAGAAAA ATTGAGCAGA TAGTACAGAA GATTGCCATA TACCCCTCAC
CCACAGAATT TCACAATTTA CCTGCGATT AAAGTCTAAT GTTAATATGA TATATTTAGT ACAAGTAGTG GGATTATATT
GATACATTAT TATTAATTAA AATCCNCAA

SEQ ID NO:694: (Length of Sequence = 330 Nucleotides)

GGCATAGTCA CTCCAGACA TGGTGCCTC TCCATGTGGA GTAGGTCAAA GTCTCCGTCC TCCTGGCCA GGTGGAAGCT
CCAGAGGGAC ATGTTTCAGC TTAGTACAAG GTGGCTGACA CTA CTCTCT GTAGGAAGAG GCTGGCTGGA GGTGAGGGCG
CCCCACTCAG CCTGTACCCA TCAAGAAGTA TTCAGAAAGG ATGTCTCTGG CATCCACAAG ACTACTGGGC GAACCACT
GCAAAAATGA AAACTAGCGT ACACAATTTA AATTGGTCTT AAACAAGCAA ATAATCCAGC CATTGGTGAC TCTGGGAATC
TAGAGTGCAA

SEQ ID NO:695: (Length of Sequence = 344 Nucleotides)

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CTGGTTCCCTT CTGGTCTGAA ATTAGAGTAG ACTCGTCTG AGTACTTGGC AAATGACTAT TTGATTCTCT GATTCCCTGG
NCTCCATGCT CACCAGATGC ATAGCAGGGA TCTCTCTAG NCACTCACAT CCAATTTTCA GG

SEQ ID NO:683: (Length of Sequence = 329 Nucleotides)

GATTTTAAAT AGTTAAACA TTTTITAAA TCATAAGTA ATTCTTACTC TACTCATTTA TACACACATA TACTCACATG
TACACAGACA TACCTACACA CACACTTATA AATACATGTA TACACAGAAT ATAGTAAGGT CTTTATCCC TTTTCAATGA
AATAAATATT GTATTCTATA TTTAGNATAA ATAATGTTGA AAAAGTGATT TTGGAGAAAG GTTGAAATGA TTGAGTCTTA
AGTGTGTCAA TGTATAATCT ACCCCTTCT AAACATCGTG TTTTAAGTAG TCATCTTACT TCAGAAATTA GAGGCTCAAT
GTGTTTAGG

SEQ ID NO:684: (Length of Sequence = 281 Nucleotides)

AACATGGCTG ANTTGAGATT ACACGCCAT GATACATTGN CTGACAGCAC TTCACATTTT CCTGAGTTG GGGACAGAAA
TCACACTGCC CAAATACATT ATCTGATGGC TCCTCATGTT TCCCAAAGT TAGGAAAGGA GGTCTATAT ACATACATGC
ACAAGTGCAT ACACACACAC ACACATACAC ACACACACAG TGCTAGATGA GATGTTGANT GNCATAAGGA AATGAAAGTN
CCATCTCTCT NITNCCTACC CCTGCATCT GTCCCTINAT A

SEQ ID NO:685: (Length of Sequence = 324 Nucleotides)

ATTTTTAATA ATTTTAACT AGCTACAAA TGTCAATCAC TTCACAACT GACAGAGGAG ACAGGAGGAA TTTAATATTA
CATGCTATAA TGATATTAT CTCACAGTTT ATATTTCATT CATTATATTT ATTTTITTA AAGGTTTCTT TATCAGCTAC
TAAACATCTC AGCAATTTGG TGTGCATAGC TCTAGATTAA GCAACAAAGN ATTGTACTGA TAACAAACCA CAGGGGAAAT
GGTGGTTAGT AAGAGTCAGC CTTATAAAT TTACATCCAC ACTGTTTCA CAGCAAGNTT GCTCTCTCCA AAACGGTGGN
CATC

SEQ ID NO:686: (Length of Sequence = 380 Nucleotides)

CGAGGAGGAG GAGGAGAAAA TTCCCCAGA TTGGGCGAGG CCGGCACCCC ACATTCCGTC CTGTTTGTAG AGGAGGAGGG
AAGAGAAATA AACGTGGCAG CGCATAGAAG GCCAGCAGGG AGACTGCTTT CCAGACACCT CCGGCCACA CAGCGTTCA
CCCCCGTTT TTTAGTCTT GGAAAAGSAA TTGGGCTCTG TTTTCTTTT GGGCTCTGTG CAACTNCAGC TACAGTGGAA
AAAAGCAAAC TGCTCTTGAT CCCAGGCCCT GCCTAAGCCT CAGCAGAACT TTAAGCCTA AACTTNAAGA GCCTCACCCG
GACGAGCAGG CATNCCTTAA CCTTAAAGCA ATCCAGTTTC ACGGCTGGT TCAGTGAAT

SEQ ID NO:687: (Length of Sequence = 305 Nucleotides)

GACACTTCCC CTCTTTTATG GAAGCATAGT AAGATTTTTC CTTTATGGCG ATCATGATGG AGAAGTATAT GCTACAGGAG
GNGAGGTICA AATTGCAATG GAACCTCAGG CACTATATGA TGAAGTAAGA NCINTGCCAA TTGCAAAGCT GGATAGGACA
GTGCTGAGA AAGCTGTTAA AAAATATGTA GAAGATGAAA TGGCAAGGCT CCCTGATAGA TTGTCAGTAA CTTGGCCTGA
AGGAGATGAA TTATTGCCTA ATGAGATTAG GCCTGCTGGA ACCCCTATTG GTGCGTTAAG AATTG

SEQ ID NO:688: (Length of Sequence = 390 Nucleotides)

GAAGTCATAA GGCCTAAATA TTAATCCAST CTGTGACAAC GACAAGGTGA ATACAAGCCA GTCTCTACTT CTCTGGGCTT
CTGTTTCTG CACTTTTATAT AAAGATTGGG CAAGATGGTC TAACTTAAAT TTTATGATTC ACTAAGTTGA TTTTGTATGG
GGCAGATTTT NCITCGATGA AATATTACA AATAAGNCAC TCAAATAAAT CAGCAATGGG GTGCAGATGA GGACTACCGT
TTCTACAGCA AAATATGGGT GAACTCAGTA AGTGTAGGNA CACAGAAGTT AATGCTGACC TCTTGCATAG CATGTATGGG
ATATTAAATC ATTTCTGCC TTCCATTTC GGGGTGAGGG AGGAACAGCT GTTCTGTAAC TCTTTTAAGG

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AAATATAATA TCAAAAATCA CTGCTGAGCT CTNCTGGCCT TCCATACTTA GCTCACCOCG GCACTTGAAA TTTCCACTTA
CTAATAACAA CTGCTCCTCA GGAAGGANGA GATTACTTTA GNAATCCTT GCAGGATGTT CCTGTCTATG GT

SEQ ID NO:677: (Length of Sequence = 333 Nucleotides)

CGCATGCTAA TTTAAAGATA TACAGGAAGN GAAAAGTAGG AGTTAAGTTG GATGTTGTTA GAAGTTGGAT GTTAGTATTA
CCTTCAGGAA CAGATCCCCA TGGCATGTCA CAGGCCTTAA TTATATACCT GGCTTTCTTA TTGTCTCCAC TTTATCATGA
GGACAAGGTC TTGGTTTCAT GGGAGGAACT TCTCCATTGA AATAAATGTC TGCCATGTCA GCACCGTTTG TNCCTCAGT
TTTAATATAA TGGACCATAT ATTAAACATN ATTAAACATA TTTTAAATN TGGTGTCACT AGGTAGATGC CCCAGNCATC
CTACTTCCCT CAC

SEQ ID NO:678: (Length of Sequence = 359 Nucleotides)

AAGGAGACAA AGAGTAGATA TGGTATCTTG GGGACAAATG GCACATGAAA GCAGATTGG TGCTTCTTTG GTAAATGGTT
TGATAACCAA TCCCTAGGAG ATAAAGTTAA TGTGCTTTT TTTTTTTTT TTAANCGAAG GTCCCTTACT GGTCTGCTT
CCATGAGTAG CCGTAGCCAG GGGAAAAGGG AGAGTTTTT TTTTTTTTT TTTGAGAAAG AGNCTCACTC TGTGCCCCAG
GNTGGAGTNT AGTGGCATGA TCTGGGCTCA NTNCAGCCTC TGCTCCCGAG GTTCAAGCGA TTCTCNTGCC TTAGCCTNCC
GAGTNGCTGG AATTTCAGGC GCATGCACCA TGCTGGCT

SEQ ID NO:679: (Length of Sequence = 339 Nucleotides)

GGTGGCACAT GACTATAGTC CCAGCTACTT GGGAGGATGA GGTGAGAGN TCCTTGAGC TGGGGAAGTA GAGGTTCAG
TGAGCTGAGA TCTCACTACT GTACTCCAGC CTGGATGACA GAGTGAAACC CTGTCTCAA AATAAATAAA GANAGAAAGA
NTATAAATAT TTTGTATCAA TTTTCAGCTT TTACAGTCAA TGAAGTTAAG TCTTAATTTT GGTACAGAA TTAAATATTA
ATATTAACAA TCAAGGCAAT GTAAAAGTAA AGTACAGTTG ACTGAAGCTG GGACACAGAC GGNAAAGAGA GTGAATGAAA
AGAAGGATAC TAATATTCT

SEQ ID NO:680: (Length of Sequence = 356 Nucleotides)

CTGTATAATC AGGTATATCA CAAAGTCTAT AGTCTCTGAG ACATGGGTGA GTAGGTGTGA GCACCTGGTG AAACAGGTCA
GAGGAAAAGC AAGTTGGCGT TGGAGTCAGC TGTCAAGAGA TAGATCCGTG ATGGTATCGA GATCACTACA GACAGGTGGT
GGTCACCTAG TGTGTCCGC TGAAATTTGG AGGGTTTAA TTTTAATCCA AATACCATAG AAATGGATAT GAAAAGATGG
GTGACACATG CTGCACGTTG GGAAGTGGGG ATGACCAGGT GCTTAGTTGC ATGGGAGAGG CCACAAGTGC TTGGCAATGT
TTTGTGNGAC TTAGCCTCTC ATCTCAGGAA TTAGCT

SEQ ID NO:681: (Length of Sequence = 345 Nucleotides)

GGCCTGGTGT TTGGCTGAGG TGCCTAGGA CCCCTGGCAG TGGTGTACTG GATGGCATCA GTTCTGATGG GTCANATGTC
CATTTCTACA GGTGGGTGCT GGAGAGGGAG CAGTTGTAA ATATCTTTAC TATCTCCCT NCTCCGACA CCTAGATGCC
CAAATATACA GCACGTAGTA TCGAGGCAGG CCTTTTIGAT TGACATCAGA ATCAGGTTTG CAATGGAATA GGAGCTTTCC
TTCTCTCTGT CACTTTAGCC CCAGGCTCCA CCTCANAGTC TGAATGCTC ATACCTATGG CAGGTGACCT TGTGTACAG
NTGGGGTTA ATGCCATTCT GTCT

SEQ ID NO:682: (Length of Sequence = 302 Nucleotides)

CTCAGACATA TCTTTTTTTC TCCTAGCATG ATGCCACCC CAAGGTACTT ACACGTCTTC AACACACCT TCCGACAGC
TTGCTGGTAT CTGTGTGGC TATTCTGGTG CACGGAATAA TTCCCATCTT TTGAGATAAT GGGGGGAGC CTAGTAGGCT

SEQ ID NO:670: (Length of Sequence = 234 Nucleotides)

AATAAGTTG GGATATTGA TTGTTTCCTT TTCTGATCTT TATGCTGACT GCAGTATCAG ATACCATTTC ATTGTTTAAA
AATCTTCCTT TTTTTTTTTT TTTTTTTTIG CATTITGCTC TTTTGTCAAT GTTCAAAGT CAAGTTGATG GCCNCAAAT
TCCAGAGGCT AAGCAATGA GAAGTTTCAT CTACTGGCAG CTAGTTTTAT TTCTTAAAAA TACATTAAAT TAGG

SEQ ID NO:671: (Length of Sequence = 252 Nucleotides)

CCTGAAATGT AAATTGTTTT TAATATATTT AAGAGCACAC AGAAGTCTTG ATTTATAAAA AAATAAATAT ATAACATGAC
AAATTTACTG ATGATCCTGG GGCTCTGAGG TCAAACCTCT TAAATGATCA GTGAAAACAT AAAACATCCA TGATCTGTTA
ACACACACAG GGGCATATTC CAGTTGTAAA AAACAANITC CTGAAGGCT CAGNACGTAC AAAANTCAGT NTTINTGGCA
GAAAGCACAT CC

SEQ ID NO:672: (Length of Sequence = 366 Nucleotides)

CCATCCAACCT ACTTACTCAA TCCTCTTGAA ATCTGCCTTT TGTAAATGTAA CTGATAGGCC AGCGTTTTCT TTCACTGTGG
GAAATAAAGG CTACTTGGTT GCCTTAGGGA GGGCAACAAT GTCAGCTGCA TAAGCAGCAA GAATATTATA TTTNATTACT
AGTCCACCCT TAATAAGAG AGAAACCTTA GGAAATGGAA AGAGGTGTCT GTTTTATATT TCCTTTGCTT TTCAACCATT
GTTTACACAC TCTCCCTCT AGTGCTTGA GAACCTTCAT GGAAACTCTG TTCAGGTTCT TGACTCTCAG CGACANATGT
GGAGGTCTTT GTGGTCTTAG CTCTCTAGGC CTGAGAATCA CATACA

SEQ ID NO:673: (Length of Sequence = 349 Nucleotides)

CCTCCCATCT TGGCCTCCA AAGTGTAGG ATTACAGGCG TGAGCANCCA CACCCTGCCT GGTGTGTAC TCTTTTAAAT
ACTAAGTTTT TAATGTTAAA TGCTGCTTTT AGATACACTG TAAAAATACA CCTATCAATG AGTTTTTTTA TTAATAACAT
TGCAATTGTA CTAGNCTTTA AATACTAAGC AATAATTCAG GCTTCAATGT TGGTTTATAG TTTTCTCAIT TCTTTCATTT
AATACCTCTG TAAAATGAAG CAGTTACTTC CATTTTCTCG AGGTGAGATA AGTGCCCTGC ACAAATGTTA TAGGNCCAGT
AAGTGGAGAC TGGAGCTCTG GATCCTAAT

SEQ ID NO:674: (Length of Sequence = 256 Nucleotides)

GCACCTTGGG AGGCCGAGGC AGTTGGNTCA CCTGAGGTTA GGAGTTTGAG ACCAGCCTGG CCAACAGGGT GAAACCGTIN
TTCTCTAAA AATACAAAAN TTAGCCGGGC GTGGTGTGTC ATGCTGTAG TCCAGGTAC TCAGGNGGCT GAGGCAGGAG
AATCACTTGA ACCCGAGGTG GGGCAGGNGG AGGTTGCAGT AAGCCAAGAT CGCGCCATTG CACTCTAGCC TAGGTGACAG
AGTGAGACTC CATCTC

SEQ ID NO:675: (Length of Sequence = 292 Nucleotides)

GAAGTCATTT TAGACTCTCA ATTTTAAATT AATTTTGAAT CACTAATATT TTCACAGTTT ATTAATATAT TTANTTCTTA
TTTAAATTIN AGATTATTTT TATTACCATG TACTGAATTT TTACATCCTG NTACCCCTTC CTCTCCATG TCAGTATCAT
GTTCTCTAAT TATCTTGCCA AATTTTGAAG CTACACACAA AAAGCATACT TGCATTATTT ATAATANANT NGCAITCAGT
GGCTTTTAA AAAANTGTTT GATTCAAAAC TTAAACATAC TGATAAGTAA GA

SEQ ID NO:676: (Length of Sequence = 392 Nucleotides)

ATCAAAGATT GCAACATTT ATTTTGATCC TGGACTACAG TGTGGGGATC ATTGCTATGT TGGCTTGCCT TTNCTATCCA
AATCTGAACC CAAAGTGCAG CCTGGTGTAG CCATGCAGGA AGATATGTGG GATGCTGACT GGGATTTGCA TCAAAGCCTG
TTCAAGGGAT GGACAGGAAT AAAGGAAAAT NCAGGTCATA GATTGAGTGC TATATTTGAN GTAAATACAG ACCTTCAAAA

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SEQ ID NO:663: (Length of Sequence = 325 Nucleotides)

CACAACAATT CTATGAAATT AGCTGGGGAG ATACTGTCTT TATTTTTCAC AGCTGAAGAA ACCAAAGCTT TGGGAAGTTT
 GTGACTTCTC TGAGATCACA GCTGGTGATA GAAGGAGCTG GGACACGGCG TTGGGTTGAC TGGCTTCTGG TTTTGGTTCT
 CTGGCTTCTA GTGCTGGAAG AAGCCCTCTC TTTCCTTCT CTTTCTCAG TAGCATCTGA CTCTTTTCAT AAGCAAACAG
 CTGTATAAAC AAAGCCCCA TTTTGGTCAA GCACAGGGTG AATGTGATAT TTGTTCCAC AACCTTATTC TNCACCTAAC
 AGCCG

SEQ ID NO:664: (Length of Sequence = 300 Nucleotides)

TTGCTGAGAG AGATGATGTT TCATGGGTGA TGTCCTGGA AGAGATTGGA TAGGACCCAA GCACAGAGCA AGAAATTGGC
 TTTAGGCAAG TCAGATTGT CTATACTAG TTAGGAGTAA AGAGAAATGG ATGATACAGA TGCAGCTATG TTCGTAGGAG
 GGAAGTGGAG GGAATTCTG TGIGATGCT TTAGTAATGT AGGCAGCAAG GTCACTACT GACAGTGAGA GGAGAAATTC
 GGGGAGGCTG GTCACAGTTT GAAGTAATAG GTATGGGGA GGCAGATGTT TGTTGGTGA

SEQ ID NO:665: (Length of Sequence = 327 Nucleotides)

CAATAAGAA CCCAGAGAGA GGGAGAGATT CACAGACAAT AGCTTAAAAA GTCTAGAAAT TATAGACCGA TTGAGGTCAG
 CAAGAAACAA ATTATCAAT ATATCCCCG AGGGCTAGAG CCAGACTTTC CCTATGATT CCAAAATTAC TTCGAGTTT
 CATTAGGGTG AAAGGCAGTG CAGTCTCATG AGTTCAGAAA GTAAAGGTTG TTCCTTAAAA TTTAGATAGA CTTGACAACC
 ACTTAGGATG GCATTTTGGC ATTCTGTCCC TGCTCATCAA AGAAGTTGCT CAAATTTGTG GGTAGAGGA ATGAGGAGCA
 AGAAGTA

SEQ ID NO:666: (Length of Sequence = 319 Nucleotides)

ATTCCCAAGG AGAGGCTGAG ACAGAGAGGC TTGAGCTGT TCCTCAGCCC CCTACCCATA CTCCCTCCCT ACTGTTGATC
 AGGCTGGTCT CTAACCTCG ACCTCAGTG ATATGTGTG CTCAGCTCC CAAAGTGCTG GGATTACAGG TGTGAGCCAC
 CATGCCGCG CTGGGTTTA TCTTAAGTTC TTGTGTGTC TGTTCATCT GCATGAATAC ATTTCCTCA TTTACTTACG
 TCTTAGCTTA AATGATACCT CCTTCTTTC CTACTGCCA TTATCTTCCC TTGTCACTCC ATACTCAGAT TTCATTGCA

SEQ ID NO:667: (Length of Sequence = 288 Nucleotides)

GGTGGCAGGC TGCTTGCANT NCAAGCCAG GNGTTTCTG ATGGGTGAGG GTGGGGAGGC TGCACACCAC ACAAGGTCAC
 CCTACTCTAC CTTCTACCCA CCTACCACA GCGCTGAGCT CACCACTCCC CCAGGGCATG GGACTCTTGA TAATTCCAG
 TCCATGAAAC CCTACAATA TTGCAGTGG TATGANTCCT TCTATGAAAG TACTTCCCT GAGTGTGCCA GCGCTCAGTT
 TGAAGGTCCT TTAAGTCTC CCCCAATTAA CTATAATGGG GATATTTT

SEQ ID NO:668: (Length of Sequence = 212 Nucleotides)

TCNTTCTINT TTCTTATCTA TCNCTTCAC CATGTGCTT CGGGGCTGG AACATAGTAG ATGCTCAATA AATATTGATT
 GAATGAATGA ATGAATAAAT CTNCTTACAC CTCTCATGCT TCAAACAGGG AAAGGCTAGA TTATTAGAA GTCTTGTGG
 GGATAATAAT NAGCTCAGTG GAAGCCCTCT AGTCTCACT CGAGTTTCTC CC

SEQ ID NO:669: (Length of Sequence = 281 Nucleotides)

ATCTTTTCAA CCTATCAAT AAGATGTTAT GAAAGATTGG TTCTCTGTG TACAAGTAGT ATAGAATCTT TTTGATCTT
 TGACTCTGTG CTGCTATCT CATCAATGTT GTTGCTATTA ATATCTGTC TTTAACACTG GATGTTGGGA TCTTAGTAAT
 GTTGTGATA ATAGGATTT CAGCAAACT TCCATATCCC TTGAAGATAT GGTAGTTTAT ATTACTATAT CGATAACAGT
 TTTGCTGTG GAGATTGAC TAGTTTTAGG TGTTTGAAG C

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COGAGATCGC TCCACTGCAC TCCAGTCTGG GTGACAGAGT GAGACCTTGT CTCCAAAATA AAAGAAATTT ACTGCAAAGG
 GATGTTGCAT TTCAGGTGAA TGTATGTAGC CTTTCAGAGG CCGGGCTATT TATTAGATGT ATTTTATAAC TGAGGGTTCT
 AGGTAAACAC AAGCCAAACA GATCCACCAG AAGCCTAGAG CTGTGGACTC TT

SEQ ID NO:657: (Length of Sequence = 334 Nucleotides)

GGTGTGGAA AAAAAAOCCT CCAGATAAGA TTGTGCTGTC TTCAATTTCT TGTGAGGCTG CCCAGACAAA GGTACTTTTC
 CTGATTGGGG ATCTATGTC ACCTGATTC GATACTGAGC TTGGAAGTCA GGCAGTGGTG GATCAGATTA CCAGACATCA
 CACCAACCA TTGAAGGAAG AAAGAGGGGC TATTGATCAG CATCAAGAAA CTAAACAAAC AACCAAGGAC CAATCTGGAG
 AGTCTGATAC ACAGAAATG GTTTCTGAAG AGCCCTGTGA ACTTCCTGT TGAATCATT CAGACCCAGA AAGCATGAGC
 TTATTCGAGC GATA

SEQ ID NO:658: (Length of Sequence = 286 Nucleotides)

ACAAACCAAC TCATTTCTT TCTGGATATT GTTGAACAAA AATAGCATTC AGTTTACCCN CTAGTGCTAA CAGAAGNENC
 TCAAGCTGTT CCCCCATCAT GGGNGCAGCC CTAAACAGAG GGCTGCACAA ATCTGCAGTG CTGCTCTGGG GAAGGCTNCA
 AAGCACTTTT TTCCCAAGAA GGGATGCTGT TCANGTCTGT TAGGGGAAGC ACACCGNCIN TGCCTGGGCA CAGATGAAGT
 GCCCTTCAAG GCAATCATCA TCTTTTCT AATAGGGAAG GTTTGG

SEQ ID NO:659: (Length of Sequence = 321 Nucleotides)

GGTCTTTATA TGTTCCGAG ACAGGACTGA AACTCCCTGC CTCAAGTCA TTTTCTAAG TAGCTGGGAC TATAGGCTGT
 TTTCTTTT AAAGGAAGGA TTTTATGTT ATCATGAAGG AAAATAA ATTTGGCTAA CTAAAGAGT TATTTATCAG
 GAGACACTAT TAAAAAAGG CAAATCAGAA ATTTGGAGAA ATTTTITA ATACTGATAA TAAGACAGAA TTGTACCTGT
 TAACCATAAA TATGTAGAAT TTCTACCATA TCAATAAGGT AATAGTTCT GTTGCTCCAC ATCCCTCTGC ACGGTGGGT
 A

SEQ ID NO:660: (Length of Sequence = 302 Nucleotides)

TTTGTTAAGG ACATAATGTT TTTGACTGGG GATCATGTTT GGCTGATGTA AATATTAAATG CCAAAATAGG AGCTAGGATG
 AAAGTAACAC TGTAAATAGT AGTAGAATTT ATTTCAATTT AAAATGTGTC ATGACGTAAT TTTTATGGCT TGGCTCAAGC
 AACCAATTTT AGAGTGCACC CTCATTGATG CTAATCAGAG AGAGTGGAT GTGCTGTTAC TGCTTTCTAA CTCTGCCATC
 TACGTGGCCT ATTTATGATG TGAAGTTGAT AAAGTAAACC AGTATCAACG NCTAAGTCTA GG

SEQ ID NO:661: (Length of Sequence = 249 Nucleotides)

AAAAAAAAAA ACTCTCAAGG GTCTAACTTT ACCCATCATA AAATAATTTT GGTCGAAGGG TAGTGGCACA TTTTATTTAT
 TTGGGATACC ATGCAGATGC AACCTAGGCC CATCTTTTAT GCAAAGTAGA TTATCCGTGC ATTTCTTCTG CATTGATAGT
 GAATCCTTAC TGGGNCAC TCATTCCATT TGGCAACAAT CTTAATGNN CAGGCAATAT ATAACATGTC TGAAGTCTCT
 TAGCACTAA

SEQ ID NO:662: (Length of Sequence = 340 Nucleotides)

TTTTTTTTTG GCAGCCTTGT AAGGAGAACT TCACCATTC CCAGCACATC CCTATGTGTG CGCCTATTTT AATGCACCTC
 TCTGAAACAG AGACCTTTTT GTTCACAACC ATAATAAAG CTGGAAAGTC AGTCTTCAGG CAAGGCGAGG GAGGAAAACA
 TCCCATTAGA ATTTTTTCAG GAAAGACTTA TGGNAAAAA TATCTCTCTC CCACCTCCTT TTATCCCAT GAGACACAGT
 TTCCCACTGT AATCAGGGTA ATATGCAATT NTAGTNCCTG ATATGTGATA CATTTATGTG ATGGCAAAGA TAAGTCTGTC
 TTGCATGCAG GGTACTAGAG

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SEQ ID NO:650: (Length of Sequence = 286 Nucleotides)

GGGTGGAAG GAAAGGTGAC AGGAAAGATG TGTTTAGCAT CCATGAGCAG CTGGGGAGAG TCTTTCCTGT CTCGTAAACG
 CATCTGAGAA GATTAGGAAA AAAAATAAAC AGAGCATCAG TTCTTTGAAT CTAAAAGACT TTNTCTACT AAAATTTCTA
 CCTCAAAAT CTCACATAAT GAAGANIGIT TACTTTTGIT TTAAACTCAC TTCATTTTCC CAATTAACATA TTATCAAAAA
 AGTTAGTGCA TTGTAAAATA AGNTAATAAA GGNTAACACA TTATCC

SEQ ID NO:651: (Length of Sequence = 360 Nucleotides)

GATAATGTAA ATTTTGTCTT CTGGGCTGT CATCAGGATT GCAATTTTNA GATTAGTIT GCTAATTGTT TGGCCTTTGA
 AAAATTATAT ACACTTGGIT TGTTTGGIT TTCTTAGTC AAAACAAGGA AATAAAATCA CATTGCTTT CCAAGAAAAG
 ATAATGTTTA AGTGGTTGTT TAGTGTTTIG TGCTTTGGG GGTGGGAGG GGTGTGTGGA ATACACAAAC ACACACACAC
 AAACACACAC AGTCTATATA TAANTTATT GGAGCCATCA CTATATTTTA AGGAAAATGN AAATAATCTA TTGAAGCTTT
 AAAATTAGGA ATTTTGTATT TAAGCTAAGG AGCCTATTTT

SEQ ID NO:652: (Length of Sequence = 353 Nucleotides)

GTGGTGGGNN CCTGTAAATCC CAGCTACTTG GGAGGCTGAG GCAGGAGAAT CGCTTGANCC CTGGAGGCAG AGGTTGCAGT
 GAGCCGAGAT OGAACCACTG CACTCCAGCC TAGGTGACAA GAGCGAACT TTGCGGCCAT TTACTCTTC AAAAGATTIA
 ACGCAATTAC AATCAAAAA CACTTGTCAT ATATAACACT TTTTCACATG GAAATAAAT GGTGGTTTAA GGTTTACAAT
 TCCTTTGAAT AAAATTTTCA TTATTAGTTA CAAAATGCTA AGACAGATTG AGGTCTCAA GAAAGANCIT TGAGGAAAAT
 TTATGGTTTT AAAGGGACTT TCACCAATA TGA

SEQ ID NO:653: (Length of Sequence = 224 Nucleotides)

AAGACAGGA NTACTTTATT CAAAACCAT CACAGAAATG GACAGCTTGG GTCTGTAAAC AAGCATTCAT GTTTTAGNGC
 ATAGGTCAAT AATTGTATAT GAGAGCATAC ACTGCTACAT ACAATTAAC TGNTCAGACC ACAATTTTC AATGTTTAAA
 ACAGNATAAG CTCCCTGTAA AAAGCAGCAC CTTTGTGAC GNTTTAATT TAGTATTCCT CTCC

SEQ ID NO:654: (Length of Sequence = 353 Nucleotides)

GTCAACTCTA TTTTCCATAT GAATTATTAG AITTTGGTGT GTCTGTGAA GTAACCTGAT ACGATAGATG TGTAGTATGA
 ATTTGTCCA CATGGTTGIG CCTTGGCAG AACTGCAGT ACCTGAAATG GTTCCCTAAT TTTTCTTAG TATTACTATC
 CAACACTTCC TCTATAATC ACTAGTGTAT TGTATAATTG TTAAGTGTCC TTTATTCATA TATTAAAT AAAAGAATAC
 TCTGGTAGGA TTTTGAGGGC CAATAGTGT TTTCCACTGT TTGAGGTATT AGGAGGGCTA TTTACTGATA CTTGTAGTGC
 CTTCCCATTC TGGTTTATCA TGCACCTCTA AAT

SEQ ID NO:655: (Length of Sequence = 365 Nucleotides)

GAAACTINACT TCACATTICT CCAGGGAGGG ATGCTTTTGA AAAACTGCTC AGTGAGATGA AGCACAGATC TGCTTTTINAT
 CCCTTTGTGA CCTTTTAAA GACATAAGGT ATGTTTGTAC ACTGGAGTAT ATATGAGGGT TGCTAACGTT TAGGTTGAAA
 GAGCTGCTGT TGTCACAGC TTATTATTT NCCACCAATT TTTGTCTCT GGTCTCATCC AGTTACATTT CCTGGGATAT
 GTTTTGGAG GTTGTCTAGA TCACGGCACT AGAGTCCCTT TGGGTTCTC CTCCCTCTC TGTCTATTIG GCCTCGCCCT
 TGACAAACAT TCCCCACATT CACAACCAGG CCTTTGGCTA AATGT

SEQ ID NO:656: (Length of Sequence = 372 Nucleotides)

GTCAATGATC TGAGACCAGC CTGGCCATCA TGGCAAAACC CTATCTCTAC TAAAAATACA AAAGTTAGCT GGGTGTGGTG
 GCGTGCACCT GCATTCTCAG CGACTTGGGA TGCTGAGGCA GAAGAATCGC TTAAACCTGG GAGGCAGAGG TTGCAGTGAG

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GGTATCTTAA AGCCTTTTCAG GGATTTCAT AGACACATTT CTTTAGCTGA AATCTATTCT CTCAGAAACT TACCCAACT
TCTTAATAAT GINCAAATC TAAGAAAGAT ATCATGGCTA CACAGCACCA GGNAGAGCAC ATTATTTCTC TTCACAATTC
CCTTGCCATAG CATCATGGCT TCCTAAGGGC TTTTAAGTTT ATTGCTTCAA CTGATTCTCA TAAAATCTCT GAGATGCTAT
CTGGAAGTA TTATTATCCC CAGTTTGCAG ATAAGGCAAC TGAGGTCTAG ACTTGCTAAA AAATCACACA ACCAGGTAAG
TGGGC

SEQ ID NO:644: (Length of Sequence = 373 Nucleotides)

CTTCACATCA GCAGCCGGAC GAGGTGACTG AAAATCCAAA ACAGAAAATT GCAGCAGAAA GCAGTGAAAA TGTGATTGT
CCAGAGAATC CTAAAATGAA GTTGATGGA AAACITGACC AAGAAGGCAA TGATGTAAAA ACAGCAGCTG AGGAGGTACT
AGCTGGTAGA GACACATTAG ATTTTGAGGA TGTACAGTT CAATCATCAG GCCGAGGGC TGGTGGTGAA GAATTAGATG
AAGGTGTTC AAAAGATAAT GCTAAAATAG ATGGTGCCAC TTAAAGCAA TCCTNGAAGG ANCCAGAGGA GCGAAGGATG
CAGATCACTG CACCCGTACC CCAAAAATTG GAAAGTCCCC TCACAGGCCA TTT

SEQ ID NO:645: (Length of Sequence = 310 Nucleotides)

TTTTTTTTT AAGACTCAAG GTAATGAAAA CTATGAGTAG AATAGTAAGG TGTGACAGGG GACAAATAAG TAGATATAAA
ACTATGCTGC AATATTTTAG TTATTAAGC TGGGAAATAT GCAAAATGTA GTAGTGCTTG GAACCAGAGA AGGTCTATA
TTTAGCTGT CTTCTGTAGC TAAATCTGAC AAATTGAAAA ATATCATATT CTCGTCTTA GGTACATTTT ATGTATATTT
TGACAGCATA TCAATATAT GANACATTAG GTTAAATAAA TTAATCCA GTGGGATAAA CTATATGGGG

SEQ ID NO:646: (Length of Sequence = 362 Nucleotides)

CTTGGGATTG CTAGATCAGT GTTTAGACA GGAATGCCAA GGCAGAAAAG AATCACATAT CCAGGACCAC ATAAAANCTG
GAGTGTATGT CATAACAAAT TTNCTCTGT GCTTAGAAGT TTTATGGCTT TGGATTTTAC ATTGATGTTT GCAGTCCATT
TTGAGTACT TTTGTATCT GATATGAAAT ATACCCAAGT NCATTTAAAA AATAAGATTA TACAGTTGTT TATGGAATGC
ATTTATGTAC ACGGGTAATC TGTTTGATT TTGTGTAT GTTAAACAT CTTTATTATA GTATTNGTA AGAGTAGGTT
AATATTGACC TTGGGCATTT TTAAACCAAG GGGGGAATTT CC

SEQ ID NO:647: (Length of Sequence = 226 Nucleotides)

TTTGGGCTC AGATCTGTAA GTTTATTTGC TCAATGTAG ACAGCTACAT AATGCTTAC ATTATGATA TTCCATCACT
GAGGAACTG CTAAAGATGG TCCGTGTGTG AAATAATTCC TTAGAGAAAC ACGGAGCTGG AAAAATAATC ACTGATTAGA
CCTTAAAAAT AGTTCAGTGC ATAACATGNC AAAAAGCACA AAGGCTCATT CAGAGACAT ATTTGT

SEQ ID NO:648: (Length of Sequence = 198 Nucleotides)

AACTAAAAAG TTAACATTT TACAAAACAA CAAGTTTTC TTAATTATG ATTTGTTATT ATAAAANCTA GTAAGAAAA
ATTCCACCAC ATGAAAGCAT TTNCTAAAAT TCATACCCC GTACCTATTT TTAANTACAG TTGGTAAAT GATTAAGCTC
TATTINCAIT TTGANTGATC ATCGGTTTTA TTTATTT

SEQ ID NO:649: (Length of Sequence = 337 Nucleotides)

ACATCTGCAG CCATATATGA GGTCCCTCAT GAGACTTAG AACAGGTGT GTTTAATGT GACAGTGTGT CTGATGTGTC
CCCAGCACAT TGGGACCAGT ACACAGTGT ATTTGTACAT CTGCTGAGTA ACATTGAGTG TGTGGGTAAC TAAAGCCCTC
AGTAATTATT TTACTTAATG TTTTCAAGCT TAATCTGAT CTGTACTTG CATGATTTAT TATTCCTTGT GCTAAATCT
TCAATGTCT TGCCITGATT GATCTGTCAT TATCTATCAC TTAATAAAA TANTAAATNC CTTAATTAA GTCATGGTTA
AATGAGGGAC TTTGTTT

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TTCATAAAAA TTTTACTTAA AATCTGTAAAC GCTAGATATT GACTATCCCTT AGTTGAGTCA CTGAGGTTTA AACACAATGG
 TAAGTCTTAA AGTCTGCTAT TTACAGAGCA TTGAATCTGT ACCAATTTGC AATAGAAAGC CTTCAAGTATG CAAGAAGTTT
 GCATGGGTAT TAAGAACACA GCTTAAATTA GGCATTTGAT CTAATCTGCA GGAAGAATTT TCTTCCCCAA AACAGAATTA
 TAAAAGCTTA CTTTAAACAG GAGGCAGAAAT AATTCTTTTA GGAAACCATT TCATTCTGTT TCTACTAACC TATACCATCT
 GAGGAATTCT AGGGAGGATA ATAAAANTCT CGTGTATTCC ACAGCAAACCT TACATACCCCT AAAG

SEQ ID NO:638: (Length of Sequence = 409 Nucleotides)

GAAATTTTTC ATCAGCTCTT GTTTCCTCTC ATTCTTTTGG ACCTTGTAGA TTTATCCCTT TTTCTTAATT TATTCTCACT
 TAATGGGATT TCAGGAGCAT ATTGACTAAG TTTTCATTTT TACATGTATA CTGGGGAGTA TGACATAGAC ATCTCTGTAC
 TTAGATATTA CTGATGTAAAG TCTACTTTGA ATCAAATGAA CAGATGTTTA AAAAGTATTTG TNCOCATTTG TTTTAATGAT
 TTCINCCGTG GAGTTGGGGT GGTGCTGCC ATCACCACCT CAGGACGGGT ATTTGAAAAT ACCTGGGNNNA AATTGTAAAC
 ATGTCCTGGGA AAACACTGCA GGATATTTTA ATTGGGCAGA GGGGTCAAGG GGATGGATTA ACCATTGCGG AAATGTGAGG
 GACGGGTCC

SEQ ID NO:639: (Length of Sequence = 197 Nucleotides)

GGTCTACTC ACGGCTCAAG AGCATGGCTC AGGAGGAGAT CCGCAGAGAG ATGGACAAGA TATCGAGGA CCTGGAGCTC
 TCCAACAAAC GGCACCTACT GGTGCAGACA TTGTGGGGTG GCATGAAGCG CAAGTGATACC GTGGCCATCG CCTTGTGGG
 CGGCTCTCGC GCCATCATCC TGGACGAGCC CACGGCG

SEQ ID NO:640: (Length of Sequence = 398 Nucleotides)

GAGAAGGAGT TTCGCTCTTG TCACCCAGGC TGGAGTGCAA TGGTGGGGC TGGGCTCACT GCAACCTCTG CCTCCCCCGG
 GTTCAAGGGA TTCTCTGCCC TCAGCCTCCT GAGGAGCTGG GATTACAGGC ACCCGCCACA CACCCAGCTA ATTTCTTATT
 TCCAGTAGAG ATGGGGTTTC ACCATGTTGG CCAGGCTGGT TTTGAAGTCC TGACCTCAGT TGATCTGCCT GCCTGGCCT
 CCCAAAGTGC TGGGATTACA GGGGTGAGCC ATTGGCACAC AGCCTTATCT GCATTTTCAA ACGGGCCAGT ATGGATGGGT
 TTTACTCTTA TACTINGAAG GTCATCCTTT TNAAAAANG AACCTTTAAA ACCATTAACT ATATATAAAA ACTATATT

SEQ ID NO:641: (Length of Sequence = 402 Nucleotides)

ATAATTTTNA GCAAAATGAT ACAAACCTNT NTTAACCAAG TAGAAGATTG GTAGTTACAG TGGAAATGTC AGGGAGTACA
 GGGGGGCCAC CACTGGAGGG AGCTGAGGCC CTGGAAAAGG AGTCTGATTC TTTGCAATTC TCTCTCTGCT TTTNTTCCCA
 GCCCCGTTAC AACCGAGTTC ACGTGGGGGG CCGCAGTGCA GCCCCAGCGG TGGCAGCTCT TGGAGTCTGT CCGTTTATTA
 TGTTTCCCCC ACGAGOGTOS CTGGGTGAGT GGCCTGGAGA GCTCCCGGTG TTAACATTC GATCCTAGAC CGGGGGGACG
 TGTCACTAGG TAAAGGCCAT TGGGTAAACCA GAGTAGATCA GGCCATGGCA TTTGTCTGGC CCTTTTACA GCAATTAAGG
 GG

SEQ ID NO:642: (Length of Sequence = 395 Nucleotides)

CTTCAATGAT GCAATTGAT TAGCTGTGTC TTACAAACAG AACTCCCAGG ACTTCATGGA TGAGATTTTT CAGGAGCTCG
 AGAATTTTCA CTTGGAGCAG GAAGAGGAGG ACGTGCCAGA CCAGGAACAG AGCAGCAGCA TCGAGACCCC ATCAGAGGAG
 GCGGCTCTTC CCCACAGCTG AGGGGCTGGG GCTAGGGGTG GGTGGAGCCC TTTTAAATA CCTTCCCTT CAACAACCTCT
 CCAGCTCTGA ATGGAGAAAC TCTCTAGGNC ATCCCTCTT CTACCTCTTG CAACCCACCC ATCCTATTAG GCTNCCACAT
 TCTAGGGGCC GTGATACAGG GGATGAGGGT CAGCAACCAG CAAACTCTN GGACTTGTG GGAAGAATTT TCCCC

SEQ ID NO:643: (Length of Sequence = 325 Nucleotides)

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TCATTACATC AAAACACAC CTGCACACAT ATNTTTATTG CAACACAATT CACAATTGTA AAGATATGGA ACCAACCTAA
GTGCCCATCA ACCCAATGTA GGG

SEQ ID NO:631: (Length of Sequence = 221 Nucleotides)

AATTTTNACA TATCAGTAAT TGTTTTTATA ATTTGTGGTT TINATGAAAC ATTGCTATGC ATTTATTAGG AAAAAGTAA
TTTCCCAACA GGTGAAGTGA AAAGNTATTT TAACTATAT ACATAATCAA GATCCTGCCT CTACGGAATT AGCTAAACCT
AAAAATGTTT GCATTAATGN ATAAATCTT CCNGCATCC TGGGCCNGN TCTGGAGGTG G

SEQ ID NO:632: (Length of Sequence = 344 Nucleotides)

TGTGATGGAG ACAAATACIT CAGTATTGGG ACCCATGGGA GGTGGTCTCA CCTTACCAC AGGACTAAAT CCAAGCTTGC
CAACTTCTCA ATCTTTGTC CCTTCTGCTA GCAAAGGATT GCTACCCATG TATCATCACC AGCACTTACA TTCTTCCCT
GCAGCTACTC AAAGTAGTTT CCCACCAAC ATCAGCAATC CTCTTCAGG CTGCTTATT GGGGTTGAGC CTCTCCGGN
TCCCAACTT TGTGTTTCAG AATCCAGCCA GAGGACAGAC CTCAGTACCA CAGTAGCCAC TCCATCTCTT GGAATCAAGA
AAGACCCAT ATCTGCTCTA CAGA

SEQ ID NO:633: (Length of Sequence = 378 Nucleotides)

GGTCAGACCT GAAGCGGCA CAGCGCTGTG ACTGCCAAG ACCCCACTG TAACAACAAC CCAGCTGCCA CCTATTTCAC
TCAAGGCCCC AGGGCTCTCC AATTAGCAGG TAGTGAAGCC AGCCAGGCTT CTNTCCTTC CTTCAGTGCA GTAAGCTCCC
CTGGTCCCTA GATGCATTCA AAGGTGCTGT CTGAGAGCCA GGGCTCTCAG TCATAAACCT TATAAATCTA CCTGGNGTTC
TGTTCTACCA TCGCTGAGCT GGCAGTGAAT CCACCGGCA AATCCCTTCC CACINTCCCC TCCCCCTTN CCCAGGCAGG
GTAGTCTGTT NCCACCTACG AGTTCATCAC AGTCTCATGC GGGATTACTG CCAGCTTC

SEQ ID NO:634: (Length of Sequence = 28 Nucleotides)

ATCAGTGGTC TACCACAGNT TAAGTAACGG GTCATATTG GAGTATCACA CATCTCAGTC TTGTAGAAAT TAGGNACAGC
AATTAGGAGT CATGCACATA TANGAGATGT AATCCACCC TTTGACTATA GCCTACTCTT GINTTTTACA GAAAAGACTG
TGGNGGAAGA AAACCTTTA CCCINTTNTT CAGGGAGAAA CTNACANCAC TCANCTGCCT GGCAGTGAAA ATNTGGCATC
CAGTCCACTT TACCATCAGT GTTAAAGGAA ACCATCTCTG GTAAGC

SEQ ID NO:635: (Length of Sequence = 226 Nucleotides)

TTGGGATGAT GCTTTTATTA AACGGAAGCG TCCAAAAGG TCTGAGTCAA TGGTGGAGAG GGCAGTCAGC CCTGTGGCAT
TTCAGGGCTC CCCACCGATA GINATCGGCA GTGCTNACTG CAATGTGATA GAGATAGATG ATACCCCTGA GACTCCGAT
GAAGGATGTG ATCCTGGTGG AGTCTCAGGA CCTCCACTT CCATCTGGG NGTGCCCTC CCTCA

SEQ ID NO:636: (Length of Sequence = 367 Nucleotides)

AACGCAATAA AAAGACAAAT TCCAAATGG GCAAAGATC TGAATAAACA TTTCTCCAAA GATATGCAAA CAGCCAATAA
ATACATGAAA AGATGGCCAA CATCATTCAT TATGCATTGC AGAAATGTAA GTCAAAACCA CAATGACATA CCAGTTGCT
CCCACTAGN TAGCTACAAT CAACAAAATG GACAGCAAAA AGTGTGGTG AGGAGTAGAG AAATCTGAAC CCTCATGTAT
TGCTAATGGA AACACAAAAT GATGGAGCTA CCATGAAAAA CTGCTTATCA GTTTGACCTC GGAAGTTAA ACACAGAAGT
ACCACATGAT CCAGCAATTC CACTCCTAGG TATATACCCC AAGGACT

SEQ ID NO:637: (Length of Sequence = 384 Nucleotides)

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TTAAATATCA ATACCCACAT TAATAAAGC TATTTGGGAG CCTTAATAAT TATCAATGGT GTAAAGGGGT CCTGAGACCA
 AAAAGTTTGA CTTCACCAGG TGTTTGAACA CTACAGATCC CATCTTGCCC ATGAAGCTTC CCTAGACATC CCCACCCAC
 CGTGCTCCT TCTGCATCCT ACAATAGCAT CCACTGGTAA GGGCCACTTA TTTTA

SEQ ID NO:625: (Length of Sequence = 305 Nucleotides)

GTTCCTAGAT TACTCAAATT TAGTACTCTT CCATCTTTTC TTGTTGCTAT TCTTTTAAAA TCACAAGAAG TCCATAACTT
 AAGTAGGAAT TTGTATAATG TAACTTATTG TGAGTATATT TCCTTACCAG CTCATAAAGA ACTATGTAAA CTGGAATGCA
 TATTTTINAC ATAAAAATAG CAAAAAATAA AAAANCAAAA AAAAAACAGT ACTGGCCTAA TACTAGTNGA NTTACAGAAT
 ANGGGTAAAT ANTACATGNN CATCCTTACA GAGTGAGCAT AAACAATACA TGGTAATAAT ATTTA

SEQ ID NO:626: (Length of Sequence = 300 Nucleotides)

AGCAATCACA TAAGGAAGGC ACCTCGAGTC TAGTAACACT GTGACTCTTG CGGTCTCTTA GAGGTACTTG GTGGTCTTGG
 ATAAGATCTG GAAGAAITCT TTGGATTTC AGACATAGGC TCTTGINTC TTCCCTTACT TTCTCCCAA CAAATGGCAT
 CTCTCTCTCT CTCTCTCTGT GCTGAGCTGC CTAGAAGTGT GGGTGGGATC ACACAAGCAC CCTTNTGGCC ATTGCCCTTG
 GGACTGTGCT AGGTGAGACC TGAAGTCAGC ACAGCATTGG GTCTACCCA ACACCTGTGG

SEQ ID NO:627: (Length of Sequence = 369 Nucleotides)

GAAAAAGAGA GAGGAGAGGG AGTCAGGAGT GCTTTGGAAC TGAGGTTTG CTTTCCACTG ACAACATCCA TATCINTGTC
 TAATGCCAAC ATGCTCCCAA GTGTCTTAGT GGTGCCACA AAGTTGATCC AGCCAGAAG AGTTGCAGG ACAGTCAAGA
 AACCAGAGGT GCTGCCACA TCCCATCAC TCCCTTCCC AACTTCCCAG CCTTGCCCCA AAAGCAGCAG CTCAGGACAA
 CCTGAGATAC TACTGTNATG GGTCCCGGG AGGAGGACAG CAGGAGTCTG AACTCCAGAG GAGGGGGAAT ATGGGTAAAA
 CAGAGAGATG GCAAGGAGAC AAGCTGTNCC CAGACAGAGG GATGGGAGG

SEQ ID NO:628: (Length of Sequence = 310 Nucleotides)

TTTTTTTTTT TGAGACAAGA GTCTCCTCT ATCACCAGG CTGGAGTGCA GTGACATAAT CATGGCTCAA TGCAGCCTCG
 ACCTCTCAGA CTCAAGTAT CCTCCACCT CAACATCCA AGTAGCTGG ACTACAGGAG AGCCACCATG CCCAGCTAGT
 TTTTNACTTT TCTGCAGAGA TGGTGTCTT CCATGTTGCC CAGGTGGTTC TCGGAAGTCC GGGGCTCCAG CGATCCTCT
 GCCTCAGTCT CCCAGAGTGC TGGACCCACA GGCATGAGCC ACCACACTCA GCCCCAAAT CCATGATTTT

SEQ ID NO:629: (Length of Sequence = 443 Nucleotides)

CGCAGAGCAG AGGGTGGAAA GGCAAAGAGT ACAAGTGAGC GAGCCCTTTT TTGATGGCG TTGATCTGTT TACAAGGGGA
 CTGCCTAAAC ACTTTCCATT AGCCCCACT TCCCAACACT GTGCAGTGT TGCAATTAG TTTCCAACAC ATGAATGCTG
 GGGGACACAT TTAAATTAGA GCAGTGATGA TCAGAAAGTT ATTGTTGGGA AAGGAGGTTT TATTTTAACT TAAGTAGCTT
 GAAAAAGCTC TTCAAGGAGT TGATACAAGA ACTGAGATTT GAATTAGAGG ACCGAGTAAA GTGAAGAATC TGCGGGCAAA
 GTCCAGGCA GAGGGAAGAG CAGGAATGA TTCATCAGTA GACTTGCTCT CCCATTCTCG GCAAGGGCTA TTTACATTT
 TCTTCCACTC TCTTCTCAG CACATCTCCA CTTGGGTTTT CTC

SEQ ID NO:630: (Length of Sequence = 263 Nucleotides)

TGGATGTGGT GAAAAGCGAA CACTTATAGA CTGCTACTGG GAACGTAAGT NAGTACAACC TCTATGGAAA ACTGTATGGA
 GATTTTTTAA AGAACTAAAA GTATATCTAC CATTTGATCC AGCAATCCA CTGCTGGGTA TCTACTCAA GGAAATAAG

SEQ ID NO:618: (Length of Sequence = 352 Nucleotides)

GCCCATCCTG GCTAACACGG TGAACCCCGT CTCTACTAAA AATACAAAAA ATTAGCCAGG CGTGGTGGCG GGTGCCTGTA
GTCCACGCTA CTGGGAGGC TGAGGCAGGA GAATGGCATG AACCCGGGAG GTGGAGCTTG CAATGAGCCA AGACTGCGCC
ACTGCACTCC AGCATGGGCG ACGGAGCAAG ACTCTGTCTC AAAAAAATAA TAATAATAAT AAAATAAAAA GTTTGTTAGT
ATTAGCAGAT ACATAATTACT AGGTACCCCC CATGCTCAAT GAAGTGTGG GNTACTCTNA AAAAGTGTCC AATCTTACAG
GTGTGACTTC CTCTGGAAT GCAAATCTT TT

SEQ ID NO:619: (Length of Sequence = 359 Nucleotides)

AAAAAAACG ACCCCACAA GGGGAAGGC CCCAAGTGG CCCCTGCCTG TNGTNCCTC TGGCTCCAGA GATGTCTGCA
TAGGCCTCAG CTCTCACTG GCAATCTCC TCTTCATGG CACCAGCCAC TGCTAAACAT CCTTCCCTCA CTTCTGTGT
AAGCTTGCTC CCTGAGCCA CAGGTTGCAC ATCTAAACCT CAGCTCCAGG GAAAGGAAGA ACCAATGGAA GTGCCAGAGT
CCTGGGGCAA GCCAGAGCAT CACCTGTGAG CAAACCTCTG CTGGGCACTC TAAGCAAGCA CAGGACAAGN CCCAGAGTTT
AGTGTGTCCA GTATCCAGCA TGGNGACAGC ACATGCATT

SEQ ID NO:620: (Length of Sequence = 447 Nucleotides)

CTCTCTCAGC ACAGCCTGGG GAGGGGTCA TTGTCTCCT CGTCCATCAG GGATCTCAGA GGCTCAGAGA CTGCAAGCTG
CTTGCCCAAG TCACACAGCT AGTGAAGACC AGAGCAGTTT CATCTGGTTG TGACTCTAAG CTCAGTGTCT TCTCCACTAC
CCCACACCAG CCTTGGTCC ACCAAAGTG CTCCCCAAA GGAAGGAGAA TGGCAGCCTC CACATCTCGG GTTCAAGTGA
TTATCCTGCC TCAGCCTCCA AGTAGCTGGG ATTGCAAGTG TGCACCACCA TGCTGGGAT AATTTTTTGT ATTTTTTAAG
TAGGACACGG TTTCACCATG TTGGCCAGG CTGGTCTGG AACTTCTTGA GGTGTAAATG ATCTTNCCTC ACCTTNTGCC
TTCCCAAGTG CTGGGATTT ACAAGGTTT AAGCCACCG AATCCAT

SEQ ID NO:621: (Length of Sequence = 237 Nucleotides)

CAATACCCCT GGTCTCTGGG GCAGGTGTTT TGGGATCCTG GACAGGAGGG TCAGGTGAT TTTAACCCAG AGAGACCTGA
TCTCATCACT GTCTTTTGA GGGGAGAGAA GTTGTGTCG GCCAAAGGG ACCAGTGTGT AGAACTGCTC CTCCAGCTCC
TTGGCGATGT CACTNGTGGT CCTGGCGTTN ATGGAGCCTA CAGGGGCCCT AGGACCACTG CCCCNTTGG CAGCGGC

SEQ ID NO:622: (Length of Sequence = 247 Nucleotides)

AGAAGGTCAA TAATAACAA CTCTTCAAG GTAAAGCAGG ATGTTGAAA CCATTGCAAG GAAGCTAAAA ACCTTGAAAA
AAGATTAGAA GAATGGCTAA CTAGAATAA CAGTGTAGAG AAGACCTTAA ATGACCTGAT GGAGCTGAAA ACCATGGCAC
GAGAAGTACG TGATGCATG ACAAGCTTCA ATAGACAATT CGATCAAGTG GAAGAAAGG TATCAGTGAT TGAAGATCAA
ATAAATG

SEQ ID NO:623: (Length of Sequence = 315 Nucleotides)

AATTTAGGTT TGTTTTATTT AAGTTTAATG TTAATTCAT GCTGTGTTT AGTAAGANCA ATACAGATTC TGTATCTGTG
GCTCCAGTCA GATATCCAGT AGTACAAATN AGCTTCAAGT TACACATACT GANCAAAAGA GGTGAGCGA GCGAAGGAGG
GGAGGAGTGA GGGGAAGGAG GTAGGGGGAG GGGGAAGGAG AAGAAACAAA AGANTGAAC AGGCATGCAG GCTTTTCCAT
ACCACCTTCA ACGCTAACCT GCTTCAGTGG GAGAGTAAAG TAGGCAAGAN TGAGCAGCCA CGGATTGTG AACTG

SEQ ID NO:624: (Length of Sequence = 375 Nucleotides)

CCATGTTGGC CAGGTCTCGA ACTCCTGGCA TCAGGTGATC CGCCCGTTT AGCTTCCAA AGTGCTGGGA TTACAGGCTT
GAGCCACCAG GCCTGGCCCG TTACTATTGT TATTTTAAA TGCATTAGTA AAAAAAATAA AATTTTAAT TGCTAGAACA

GTACATATAT GTGTATATAT GTATATATCC CACATCTCCA ATTTCCTAT ACGTATATAC ACACATATAT GTTATATAGG
GCTACAGAT ATAGGATATG TGTG

SEQ ID NO:612: (Length of Sequence = 384 Nucleotides)

TGATGACCAT AAGCCCATGC TTTTCATAGA TGTTAAGGG TTAAATGAGG TAATGCATGT CGAGTCTCA GCCAACTGAG
ATTCAGGAAG CGCTCAATAG ATGCTGGCTG TCATTATTAA CTGAGTAAGT AATCCCTTTC CCACAGAAGC AGTAGAAGGC
TGACGATGTG TGTGAAAAGG ATGGATACAA TTCCCTGGGC CACAAATAAA GGTTTTTTTG GTTGTGTGTG TTGTTTAAAT
GAACTGAAAT GAGTTTGAGA GATTCAATA TTATTTTACA ATACTTCTTA ATGCTAGTTT AAAAGTTCACACATTTGTCAT
TCTACTCCAC TTCGTATGA GATAAGTATA TGAGGGNGCT TAAITCCCG NTAACTAAG CAAG

SEQ ID NO:613: (Length of Sequence = 342 Nucleotides)

TATTTATTTT TGTTGGGTGTC GACTTCCTAT GTGGGCTTTT TGGGTGACAC TCCCTTAAGG GTTCAGTTTG ACAATTCINA
GAGTTGTCTT CGAGTTGGAG GCCACCAGAG GTATCTAAGC TCCTGCTTC CTATTNATA ATCTCCAGC CCCAGCAGGT
CCACTCCTGG TTCTGTGTG TTGGCCCGG GCACAATCCC CACTGCTTTG CTAGACGTGC TTTCTGCCAT GTGGCTTTGG
GCCTAGAGCT TGTGTATAAT TGCAGCTTGT GGCAGTGGAA ATATGGCTGA ATGAGCGTCT AAACCCCTGG GTNGGGGGNC
TNAANTNCNN GGGTTTTTAA AA

SEQ ID NO:614: (Length of Sequence = 393 Nucleotides)

CAGTGTATT AACATAGCC AGGAGGTGGA AGCCACCTAA ATGTCCATCA ACAGATGGAT GGATAAATGA AATGTGGTCT
ATACATACAA TGAATATTA TTCAGCTTA AAAAGGAGC AATCTCTCC ATGTGCTACA ACGTGGATGA ACCTTGAGGA
TGTTTGTCTA AGTGACATAA GCCAGTCACA AAAAGACAAA CGCTGCATGA TTCCATTAT ATGAGGAATC TAAAGTAGTC
AAACTCTTAG AAGTAGAAT AGTGGTTAGC AGGGGTTAGG GGGAGGGGAA AAAGAAAAGT TACTGTTTAA TGGCTATAGA
GTTTCAGATA TGCAATACGN NAATTCTGG GGGATCTTT TGCACCACCA ATGTGCACCG TATAATTCCA CTT

SEQ ID NO:615: (Length of Sequence = 310 Nucleotides)

ATTATATACA TTCTTTACT GATTTTAA AATGTGTCA ATATCTTCAG TGAATCTTA ACAATCTGGG GAACTGTTTT
CCTCAATTAC CACTTCAGCA ACGTTCATAC GAAATCAAGC CTGCTCTCA TGTGAGTGC AGGNTCAACT TTAACGAA
GGTTTGTGT TGTCTTAAC ATCTTCAGAG TGAGCTTTAG GGATGCTGA AGGATGGACA GTACAAGCAA GCAGCTACTT
CCATGATACA GTGGGAAGAT AAAAGGCCCT ATTCACTCCA GCCGTGACCT GTAAATCCAG CTGCTCTCC

SEQ ID NO:616: (Length of Sequence = 266 Nucleotides)

GAGATGGAGT CTCGCTCTAT CACCCAGGCT GGAGTTCAGT GGCACGATCT CGACTCACTG CAAGCNCOCG CCCCAGGTT
CACGCCATIN TCCTGCTCA NCCTCTCGAG CAGCTGGGAC TACTGGTGCC CACCACCACT CCCAGCTAAT TTTTNTATT
TTTGGTAGAG ACGGGGTTTC ACGGTGTAG CCAGGATGGT CTCGATCTCC TGACCTCGTG ATCCACCCGC NTGGGCTCC
CAAAGTGCTG GGATTACGAG CGTAAG

SEQ ID NO:617: (Length of Sequence = 376 Nucleotides)

ATAATAATGA AAGTGAAGG GTGGGGTGC TGGCCACCTC CCAITTCITT GCCTGGGTGG TGGTGACCAC GCGCCCTTG
TGCTCTTCC ATGTGTTACT GAGGACCAAT GCGCTCATGG GCGCAGGCCA CAGGCACCCA CCTGTNAGCC TCACCTGCCA
CCTCTCTCCA TGTGGCTTN TTGCCCCG GGCTGGCTG GGCATGGGG AGCTTATNTC CCGACCAGG GGCTTGGCCA
TGINTCCTTC ACAANCCCA CTCCCCGGG ACTGAGCCTC CACTCTCTGC TGGGCTGAGG GCTCTGTGGT NGCCAGGAG
CCCTCCAGC CAGTGCCAG CCATCCCAT CATCAGCACT TGGTTTAAAG CTTCAA

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TGCCTTCCTT TCTTCAATTC GAGACAGCAG TATCATTAGT GTTGTATAGG TTATAATTAA ATCTAAGTAG TTCTTTGTTA
 AATCAAAGTT TACAGTAATA TCAAAGAAGA CTGCGCAAAC GTCAATAGTA TTCAGCAATT CACAAACATG GTCCTTAAAT
 TCCATAACAT CTACAAATGT GAAGTAATAT AATGCCAGAT TTINCAGAAT CTCTGATTTT CCTTTCTGTA GTTGTGCAAG
 CTGTTGATTG TTGTTGCGGG TTTCTACAGC AGGGAATTTT CTGACTATGA ATTTACAGC AGATTCCAGG NTTTTGTGGA
 TAAGATAGGA TGGNTTTGCC NTGGGNCCTC CACATGCCNT TCTTGATGTT GTAGAGGCGG GTGAGCATGC CGACGGCCC

SEQ ID NO:607: (Length of Sequence = 412 Nucleotides)

CTGTACCCCTT ATAAAGAGTG AAAGCCCTGC CCCCTTCTCC TATAGAACCC CTAGCAAGGA GACTGGAAGA NTCAAAAACA
 ATCCACCCAA AAAATGGCCT GCAGGGACAC AGTCCAGAG AAAGAGACTA TGTACAACAA GGTACAGTAA GTAAGACCTG
 CCCACACACA GGACTTCCAA TCGACTTCTT AGTGCTTACT CCTACAGATG AACAGATCAA CCAGGGCCAC CAGATGCTCC
 AGGAAAGACA GGAGTCCAAA AAGAAAATTC GGTAAAGTTG AATATATTTT GAGCAAATTT TCAGTTCTGT TGAAGTATTG
 GGGGGACATT CAACAGTGAG TAGTAGTTTA GGGGAACAG CTGGCACCTC TGGCAGTCC CTCAGAGGTC AANCCAGCGT
 NTAGGTTGCT TT

SEQ ID NO:608: (Length of Sequence = 419 Nucleotides)

ATGAAGGCAG CTGAACCTC CATCAAGTTT CTGCCTCCCC AACGTAATAT GGAAGTCGTT CTGGCTGTAG GACCCAGCT
 GATTGGAATT GGAAAGCACA GTGCAGCTGC AGAGCTCTAT CTGAATCTGG ACCTTGTCAA GGAAGCAATC GATGCTTTCA
 TOGAGGGTGA GGAGTGAAC AAGGCGAAGG TTGTAGCTAA GGAGTAGAT CCCAGGTATG AAGACTATGT GGACCAGCAT
 TATAAAGAGT TCCTCAAGAA TCAGGGCAA GTGGACTCC TGGTGGTGT GGATGTGATA GCTGCTTTGG ACCTGTATGT
 GGAGCAGGGC CAGTGGGGAC AAGTGCTTGA AAACAGCTAC CAAGCAGAAC TACAAGATTC TGCACAAGTA TGTGGCTTTG
 TATGCAACTC ACTTGATCC

SEQ ID NO:609: (Length of Sequence = 337 Nucleotides)

GGTGAAGTT GTAGTGAGCC GAGATCATGC CACTGCACTC CAGGTTGGGT GACAGAGAGA GGCTCCATCT CATAAAAAA
 GAAAAGAAA AGCATTCTG AAAGGAATAA AAAACAAATT GATAACATCC CCTAATCTCT AGTTGTGGG ATGTAGTATC
 CTTCATTTGA TCAGGAAATC ATATGATTGT CCTTAAATTA TTAAGTTGGC AGAATTTGTG TGGTTTCATA ATGATGCTTG
 TAAGATGATA TTTAATGGA AATGTTTTAG ACTATATCTN TTGTGTTTT TNCTGCTGTN TTTGTGTAAG GCTTAAANCT
 ACCCCCTTTA AAAACAG

SEQ ID NO:610: (Length of Sequence = 441 Nucleotides)

TAAGCCAGAG ACATTTCACT GTATTAATCT TGATACTAAT TACTAAGGCT TTTCTGTGGA CATTAAATTT GATCTGTTTA
 ATTGCAAATA CAATAAAGT CGTGATTAT GCTTAATGTT TCTGCTAGGC TGATGACATT TTGAAAATGG CACTTATAGC
 CTGTTTGTG TTGGTTACAA CTTTGTGGC TCCAGATGCT AAAAAAATC TAATTGAGTA AGTAAATAAT GCAGCTAAGC
 GTGCCTCTCT CGCTTCGAA AAGTTTTTTC TACTCCTTT TCTCCCTGGA GAGGCCCTGC TGCACACTGA TGCTGATCTA
 AGGAAATGCC TTGCTTCTT TGCCACTGAG CAATGTTAGA ATCACTAGGA GGGCAGGGCT ATCCCACTGG TCACTCTGTC
 CCAGCATATC TACCATGAAG TCAGCAGGGA CTACAACTC C

SEQ ID NO:611: (Length of Sequence = 344 Nucleotides)

TTTGGTACAG TAATTAGGTT TGGTTGATTC GGTTATGGG GTATACACGC ACATGCAAAC ACACACAGGG TGTGCGTGTG
 TGTATAAGG GGCATATACA CATGCACACA TATACACATA TGTTATATAG GATGTGTGTA TATGTGTGTA TATATATAGG
 GTGTGTATGT ATCCTATATA TGTCATATA CATGTATATG TGTATATAT ACATGTATAT GTACACATGT GTGCATATGT

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COGCTCTCTG GGTTCAGCA ATTCTCTGCT CTCAGCTCTC CGAGTAGCTG GGACTACAGG CGTGGCTCTC ACCACCAAGC
 COGCTAAAT TTTGTATTT NAGTAAAGAT GGGGTTTCTC CATGTTGGCC AGGCTGGTCT TGAAGCTCTG ACCTCAGGTC
 ATCCGCGCGC CTGGGCTCTC CAAAGTCTG GGATTACAGG CGTGAGCAGN CGCAGCGGC CAGCTGCTTC TATTTTAATC
 TGAAGTTGGA AACACCTTCC TACTTTAAGG CACAGGATCA GGGTAAGAAC CCACATGTAC GAGCTAACAG AGCTGCACCT
 CAAATTTACT TAAGTTAATT AA

SEQ ID NO:601: (Length of Sequence = 319 Nucleotides)

AGTACTATTC TGCCATAAAA AAAAGAATGA GATCCTATCA CTTGCAACAT CTTGGATGGA ACTGGAGGTC ATTATGTTAA
 GTGAAATAAG TCAGGCACAG AAAGAAAAAC TTTGCATATT CTCACTCATT TGTGAGAACT GAAAATTAAA ACAATTGANC
 TCACGGAAAT AGAGAGTATA ATGATGGTTT CCAGAGACTG GGAAAGGTAT TGGGTGGGGG GCAGGGAATG GGGAAAGTTA
 ATAAGTACAA TGCAATGAAT ACGATCTNGT ATTTTACAGC ACAAAGGGT GGCTATGGTC AACATAATT TATAGTACA

SEQ ID NO:602: (Length of Sequence = 334 Nucleotides)

CACCCACAGA CTGCAAGTG GGACAACTTT CTGGCTTTTG AAAGGCTCCT TCTTCAGAGC ATTGGGGAGT CAGCAATGTC
 CGTTGIGTTA AATCAGCTGC TGCCCATGAT TAAGCCTGTA ACCCAGAGAA CCAACGAGGA CTACAGCCCT GAGGAACTGC
 TGATCCTTCT CATATATAAT TATNCTGTCA CTGGAGAGCT CACGGTAGAC AAAGACCTGT GTGAAGCAGA AGAAAAAGTC
 AAGAAAGCAT TGGCTCAGGT CTTCTGTGAG GAATCTGGAT TGTACCTTT GCTGCAAAA ATTACGGACT GGGGACTCTT
 CAATTAATCT GACA

SEQ ID NO:603: (Length of Sequence = 410 Nucleotides)

TTTCACCATG TTAGCCAGGA TGGTCTCGAT CTTCTGACCT TGTGATCCG CTGCTCGGC CTCCCAAAGT GCTTGTATTA
 CAGGCGTGAG CACCCGCGCC CAGCCAGGAT TATTTATTTT TAAATCAGAG AACTTGAGTA CCACCTAAG GGACTTAAAT
 TATGCAATTG GAATGAACT AAAGTGAATT GAACATTAG TTTCACCTAG ATTTTATTTT TCCTGCCAAC TGTCTATGA
 GAGTTTGAGA GGGAGCCCG ATTAGACTTA GAGAAAAATA AATAAATTAC ATTTTATCTG CACACATGAA TTCTAGAGTG
 AGTTAAATTT ACCACAGCGG GGCATATATA TGTATATATA TGATACCNIG TTTTATATA GCTCCNTATA GTTTTAAAG
 CACTTTGTAC

SEQ ID NO:604: (Length of Sequence = 399 Nucleotides)

TCTCTAAGCA AAAAGAAAT GATGAAAGAA GCAAACCTGG AGCATCAGAA AGGAAGAAAG AACATGATAA AATGAAATA
 TGAGCTCTTA TTATGAACAT CGTATTACCA TTCTATGTGA AACTTAATCG TATATTTATA TATAAGCATC CTTCAGAGAT
 GCTGTGGGTT CAGTTTCAGN CCACTACAAT AAAGTGAATA TAGCAATAAA GCAACTCATA TGAATTTTTT GGTTCCTCAG
 TGCATATAAA ATTAANCTTC ATGCTATACT GTAGTCATTT AAGCATGCAA TAGCATTATG TCTAAAAANT GTACATACCT
 TTATTTAAAA ACGCTTTTAT TGCTTAAAN AGGCTAAATG GCCATCTGA GCCATCGGCT TTTTCTCTGG CAGAGGGGG

SEQ ID NO:605: (Length of Sequence = 372 Nucleotides)

ATGCCCTAGA AATCCTACCA CCTCCAGAA ATGATAGTTA TGGAAATTAA CATGGCATGT CAGATATGGT TCGCTGATGC
 CTTGCTTTAG TTCTCAGAAA TAAGGCTTTA AAAGACTGGC ATGTTTCAGG ATTGCTGTCA GGAAATGATA ATTTAAAATA
 CCAAGAGTA CACTAAGAAT TATGGAAGCA TCTGTGAAAC TAATAAGCCA GTGGACATAC TGATTTTTAC CAATGTGTCT
 ACATACTATA TTAATAAACT TCCTACAAAG TATTGTCCCA ATTCAGTTCA TCTGAGGATG TGAAACACT ACAGTGTACC
 TTAAACATC ACATTCACAA CCTGACAGA CTGAAATAAA ATGAAATTAG GG

SEQ ID NO:606: (Length of Sequence = 399 Nucleotides)

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GAACATGGCC GTGAAGTCT CGGAGATGCG CTTGAACAGC TCCTGGATGG CCGTGTCTGT CCGATGAAG GTGGAGGACA
 TCTTGAGGCC GCGGGGCGG ATGTACACACA CGGCCACCTT CACGTTGTGT GGGATCCACT CCACGAAGTA GCTGCTGTTC
 TTGCTCTGGA TGCCAGCAT CTGCTGTCTC ACCTCCTTCA TGGACATGCG GCCCCGGAAC ACGGTGGCCA CCGTCAAGTA
 GCGGCGGTGG CCGGGGTGCG AGGCGGCCAT CATGTTCTTG GCATCGAACA TCTGCTTGGG TGAGCTCGGG CACGGTCAA

SEQ ID NO:595: (Length of Sequence = 370 Nucleotides)

GAAGAATANA AAGAAAAATC CAAATGAAG AGTATTATAC AAGACAATA GTCAATAGTC TTCAAAGTGT CAAGGTCATG
 AAAAATTGAG GAAGCATCCC AGACTGAAGG GACTAAAGA AAAGTGACAA CTAAATGTAA TGGGTGATTG TGGATTAGAT
 CCTGGAATTG AAAAAGAACA TTCTGGAAC AACTGACAAA TTGAATAAG GTCTGTAGAT CAGTAACAGT ATTGCATCAG
 TGTTAATCTC CTGGTTTAGA TCATGTCTTA ATGGAATGT TTTGTACTAT TTTTGTGGA CTCTAAGGA ATGTGGGTGG
 AGGACACGGA TGAGACCTAC TTGCATCGAC AACAAGGCGT TCTACGGACA

SEQ ID NO:596: (Length of Sequence = 335 Nucleotides)

CCACAGAGCC CCAACTCCCC CCACAGGAGC CAGCTCCCCC TCGAAGGCGT GGAGCAGCCG GCCTGTGACA CCTGAAGCCG
 CCAGCTGCCC ACAGGGGCGA GGGAGCTGGA GATGSCCTCC AGCGTCAGTG CCAAGACTGA GCGGGCCCTC CAGTGTGTGTC
 CAAGGAAATG TAGAATCACT TTGTAGATAT GGAGATGAAG AAGACAAATC TTTATTATAA TATTGATCAG TTTTATGCCG
 CATGTTCTGT GGCAGTAGAC CACATCTGTT CGTCTGCACA GCTGTGAGGC GATGCTGTTC CATCTGCACA TGAAGGACCC
 CCCATACAAG CCTGT

SEQ ID NO:597: (Length of Sequence = 336 Nucleotides)

CTCTGAACA TCACAACTT GGTTCCTACC TACCACACGA GTAGCCAAAA GAAAAGAAGC ACTAATAGAG AAAGGGGTGT
 CTCACACCAG ACAGAGGACC TCTGCTGTCA ATTAGATCCA GTATCATGAC CTAACCTTAA GTGTGAAAA GAGTTCAGAT
 CTCTGAGACA CTGTGAAGAA ATGGATGGCT CATGTACAT CTCTGATCC TCACTCCCA ACCCTGGACG TGTTTCATTT
 ACAACATTCA TAGGAGTTAA CTTAGCAGTG TTGCAAGTAA AGGTTNCAAA CCAATTATT TAATCAGTGT CCCCCAATA
 AAATCACITA TCCCATTTTA TTGCTAGTTT AGTTTT

SEQ ID NO:598: (Length of Sequence = 402 Nucleotides)

ACCACTACAC AATATATCTA TGTAACAAA CTGCATTCIT ACCCCTTAAA TTCATACAAA TAAAAAAAT TAAAAAATAA
 ATAAAGTAGG ACAATCCCC AGATAAATAA ATTAATAAAT AAATAAATAA ATAAATAAAT AAATAACTTT AGCTCTTGCC
 TTCTCTACA CATAAGTTAA TGCTGATGG GGTGATGGT TATGCTTCTG TAACTATATA TCAGATGTAC TCTTGACCCC
 AAACCTAGAT GCGATTTTNC GTATCTGGA ATCTTTGCTA CCTGTATATA AACTGTGGAA CTGAAAATGC TGCATTGGGA
 GCAGTCTGAT AGGNTCTGTC CTAAGGGCT ACTCTGAGGG GCTCTAGGGG CTTCAGTCTA CAGGCCCCCA GGGAGGACTG
 CT

SEQ ID NO:599: (Length of Sequence = 369 Nucleotides)

CTCAACAAAG TTGGATTTT NTCCACGATG ACTCCTTGGG TGAATTTTTA ATCAAGTTAT TTCAACCAAT TTNTCATAT
 ATTTOGTGCA TCCCTATTCT GGTATTCAGT GAATACATGG GAGAGGTATG TNATTCTCAG CTCCACAGC CCATAAGTCG
 GGGAACCCAG ACTTCATTCC CCTCTGCTCT AACTCAGACT GTGAGGTCTAT TGAGGGCAAG ACTGATGAAT TGTTCTCTT
 CCTATCACTG GTGCCAAGCA CAGTAGTTGG CATAAGAAG TTACTCAATA AAGAGGGGGT GAATTTAATG AAAGACAGAG
 GAAGNGGGA CCTGGGGGAA GAGGTGGGCA TAAAGTGAAG GTACAAACA

SEQ ID NO:600: (Length of Sequence = 342 Nucleotides)

205

AAGAACATTT AAGTAGTTCA TACAAAGAAA TATAAATGT NCTTAAATAT ATCAAAATAT ACTCACCTCA TTCATAGTAA
 AAGAAATAAA AAACGTGCT CTGATGACAT TTTTCATCTA TGAGATTAC AAAGNICTAA AAATTGAGAA TATACATTTT
 CTATTGCCTT TGGATGGCAA TTTGGCAGTA ACTATCAAAA GTATAAATAT CTATACCCTT TGAGGTGTC AATCTCATTTT
 AAAGAATTTA TTCTTCAGCT ATGTACATAC ATGTAGG

SEQ ID NO:589: (Length of Sequence = 353 Nucleotides)

GTAATGAATT ATAAGAATCT GAATTGAGAG CTAAATATC TGGGTGTAG GCCTACTCTG CCACGNITTT NTTATTGCA
 AATATTAGAG CTGAAGTAGA TGACCTCAA GGCTCTAACC AACTCCAAA CCTACAATC AATGGCTGAC TGATATACAT
 TGTATACTCT TTAATAACAA TTAATCAAA AGANGTAAT AAATGTGTCA TGTATTATAC AACTATTATA CAGGTGTGTG
 TGTATATATA TATATNININ CACAGAGAGG AAAGACATCT ATACATAGNC ATAACCATCA AATCAGTCAG AATTTCATC
 AGACACTTTN CATTTCCAG GTCCATCAGA TGG

SEQ ID NO:590: (Length of Sequence = 364 Nucleotides)

CICATATACA TAAAGAGTGA TAAGAATCCG AAAAGACAGC CAGGGGAATT AAATGCCAGT TGGGGCCAAC GGGGCCCTGA
 TCACGAAGA GGGCGCCCC AGCTCTCAAT CTTCACAAA TCCCTGCACC CAGGGTCACA GAGCATGCGC AGGTCTTCC
 CGCCACTTC CGGGCAACT GCCAACCACC GCGCAGGCTG AGCCCCAGGC AGGAAGCAGC CCACTTGGTG GGGTTGGGT
 ATGAGTCCTT CCTCGGGGG GCTCGGTGGG TCTGAGTAT TCTTTGGCG GATTINCTGA TCGTCTGCT CCAGGTGAGC
 TNGGAAGGC CCCAGGAAA GGCCANAAG GGCCTTGCC AGGG

SEQ ID NO:591: (Length of Sequence = 311 Nucleotides)

GAAAGGGGAA TAGGGAGTTA ACGTTAATC AATAGAGTTT GGAAGATGA AAAGTTCTA GAGATGAGTG GTGGTGATGC
 CACATAACAA TGTGAGGGTA CTTAATACCA CTGAAGTGA TGTTTAAAT GGCAAAAGG GTAAATTTTA TGTATGTAT
 ATTTTACCAG AATTTTTTT TTAAGCTTA CTGCATGGG ACCAAGCGTG GTGGCTACA CCTGTAATCC CAGCACTTTG
 GGAGGCCNAG GCGGTGGGT CACTTGAGGT CAGGAGTTCG AGACCAGCCT AGCCAACATG TTGAAACCCC G

SEQ ID NO:592: (Length of Sequence = 358 Nucleotides)

ATTTTGGTTT CTACCCATCA TCCTCCTCTC AAAGGAACCA GGGGTCTTG GGGATTGGC TGATGCCAGG GATGGAGAG
 TGTAGTTGG NTCTGAAGGG GAGGCTGCA GCATGTGTGT GGCAGGTGAG ACAGACCCAA GAGCCAGCTT GGTGGGCAT
 CCTGGCTAC CCTGGGGACA CAGTGAGCGC CGAATAAAT AACATCAGGA ATGGNTACA ACGCAATGAG TAAGGGGAAT
 CTGAGTCTAT AGGGATACAG ACCCAGAGGT AAATNGCCAT GGCCACCCAC TTTCTACAG GAGAATGTGA CTAGTTGAGC
 GTAGGAACAT GGAACAAAT GGTAGAGGTG GCTGACAT

SEQ ID NO:593: (Length of Sequence = 354 Nucleotides)

GACAGACTGA AGGAATATAT GCAGCTTAAT TTAACATTTT TTGAATTTT ATATTGCAGA AGTTGTACAT ATTINCTGTT
 GTGAATTAG AAAGANITGA CAGGCAAGGA GGGTGTCTA CAAAGCACTC CATAGATCCA CCATCTGAG ACAATGCTTA
 ATGCTTTGAT GGAATTTATTT ATTINATCT TTCTATGCAT ATGCATGTAT TGTATAAATA CGNATGCATG GTTAAATAGA
 AATGGTCTC CTGGGTGTT TGTATATCCA TTTATTGTTG TGAAGTAAAT CCCCAAGAG GTAGGTGTC TTTTGCTTGA
 GGAGTCTTTT GCTACATACT GGCTGTACAT AATG

SEQ ID NO:594: (Length of Sequence = 319 Nucleotides)

204

GINCTGCTGG TAGTGGCCAA ANACCTCGAA AACAATGGGC TNGCTCTTGA TGTACAGGTG GCGTTTATTT TCATGGATTT
ATACACACTG GAAAAGCCTC T

SEQ ID NO:583: (Length of Sequence = 399 Nucleotides)

CCCAGGCCAC CATTAAAGC AGCCATTCCT GCCAAGAGC CAACATTGAG GCCAGCCGTT GCTCCAGCTA ATGTCTGCAG
GGCTCCAAGT GAGGCTATGG GGTGACAGA ATTACTGCTG CTAGAGCTAG GTGAGGACCC TGAAGTAGTG AGCAGCTGA
GGGACTGCT GGATGTAGTG AGAGCATTGG TACCACITGG TGTTCTTGA NNTGCACTAG CTGCAGCAGC TAGTGCAGCN
AAATTCTGTA ACTGCATTGC ATTCAACCCCT CCCATTGGGT GGAGGCTGCT CAGGGTGTG AGGTCCCAG AGGAGGCAGT
CTGCTGAAGG AGTGCTAAAT ACTINGGTCC AAGAGTATTT AGACCAGCAA GGTTCGCCA CACAGATGCT GCGCTGATT

SEQ ID NO:584: (Length of Sequence = 441 Nucleotides)

GTGTGTTTTA AGGATTAAAT GAGATATTAC ATGTAATGTG CTCATCCCAG TGCCAGCAC ACAAGAAATG TTCAATAAAA
TAGGAGGCAT AATTGCTCTG TTTGAATACT AGATAACCCCT TTTAATGGAT ATTCTACAAT TATGAATCTA AGGTGCTTTG
GAGGAGCCTA GGCAATCTAT TCCAAATTA AATGTAAAGG AGGTACATGA GTAAGGGATG GAGTAGGCCC TGGACCAACA
CTAGAGCTCC AAATTTCTTA AAAAGCTTGA GCTTCTTTTA CTGTGGCCAC GCCTATAATG GGAATAAATC TGGTCTTCA
AACAGTCCCT CCCCTCTCTA AGCTCTGCTG GGGAGTAGAG ACATCAGCAG GCTGGTCTG TGNITAGCTC CTCGCCATCT
TNGACTCTCA TCCCATCCC TCTTCTCTAC TACCCATTCA G

SEQ ID NO:585: (Length of Sequence = 326 Nucleotides)

GAAATGCAGG TTCAGCTATT TNGCTCTG AGAGTCCAGT TAACAAAAGT GAGTNGTGGT ATAAAGAAAG TNATTTTTTT
TTTTTAAATT ATTCCAAGC TAGCTGAGGG GAACAAGTAC AGGCTTCTG CCTAGGGGTA TCATTTTGCT TTTGGAGCAG
GAAGTAAGCA CTTTTAAAGG GGGCTTAACA TGAATGGCAC ATGGGGTCGG GGGAAAGTAAG CAAGTGCAGC ATCTACATGT
TAGTTTGTA CTTATCTAC TAGGTAGTCA AGGTGGTGAC TGCCGTGNTC TTTGTGGGGC ATGTGTACTT TGGGGTTGTA
AATTGG

SEQ ID NO:586: (Length of Sequence = 431 Nucleotides)

GAACGAAGGA AAAGCATCAA AACCTACAGA GAAATTNTTC AAGAAAAAGA GCGGAGAGAG AGAGAGCTGC ATGAAGCATA
TAAGANCGCT CGGTCCCAGG AGGAGGCAGA GGGGATCCCT CAACAGTACA TTGAGAGGTT CACCATCAGT GAGGCTGTTC
TCGAACGCTT GGAGATGCCA AAAATCTTGG AAAGAAGCCA TTCAACAGAG CCAAATTTAT CCTCCTTCCT GAATGACCCC
AATCCCATGA AATACCTGG GCAACAGTCA CTGCTCCAC CCAAATTCAC TGCCACTGTT GAAACACCA TTGCTCGTGC
CAGTNTCTG GGATACCAGC ATGTCAAGCA GGCAAGTGGG GTCTNCAAGC AAAACTTGTC ACTTCCAAA AGCAAGTGCC
TATGCTTGAC ANCCAGGCC TTAATCCCA G

SEQ ID NO:587: (Length of Sequence = 338 Nucleotides)

CTCAAGCAAT TCTCCACCT CAGCCTCCCA AATAGCTGGG ATCACTGGCA CAAACCACCA TGCCAGCTA ATTTGTATT
TTTGTAGAG ACAGGGTTT ACCATGTCG CCAGGCTGGT CTCAACCTCC TGGGCTCAAG CAATCCTCCT GCCTCGGCT
CCCAAGTGC TGGGATACA GATGTAGCC ACCGATCCA GCCCACACC CTCAATTATA CCAATTACCT GCCAGTAAC
TGTGGACTTT TGCTTCTCA CCCCTGCTCT GATCTGGAAG GAGAGGGATT ATGTATAGC TTGTAGCAC AGTCCCAAAG
TTCAATATTT CTGCGGC

SEQ ID NO:588: (Length of Sequence = 277 Nucleotides)

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SEQ ID NO:577: (Length of Sequence = 405 Nucleotides)

GAATGAAAT GGCATATTG AACATAACT TAGGGCAGAT TTTACTACT TTTGAAAAA TGTGGAAAA TATTTCTGTA
TGAAAGTAA AACAACTTTT AATTTTTTTT AGAAGTTGAG AGGATTCAT TTTGCAAAGC TGTATTATGA AGCTAAAGAA
TATGATCTTG CTAAAAAGTA AGTACAACT GTAACATGTA TTCTTTTTT AAAATCAATG CCTTINCICA TTINCITCTT
TGAAATAGGT AAAAATATGT CCTAGTAGT TCTTCTAAG TGTATTCTGG AATAAGGGAT TTATCACTCA GACTGATGCT
AAGGACCAGC CTAGATTCCA TTGAGATTGA AACCGTAATT AGTGTTTTCT GCATGCTGCT GCTTTATACC AAGGGCAAGA
AATTG

SEQ ID NO:578: (Length of Sequence = 406 Nucleotides)

CGCTACAGGG GGGGCCTGAG GCACTGCAGA AAGTGGGCCT GAGCCTCGAG GATGACGGTG CTGCAGGAAC CCGTCCAGGC
TGCTATATGG CAAGCACTAA ACCACTATGC TTACCGAGAT GCGGTTTTCC TCGCAGAACG CCTTTATGCA GAAGTACACT
CAGAAGAAGC CTGTTTTTTA CTGGCAACCT GTTATTACCG CTCAGGAAG GCATATAAAG CATATAGACT CTGAAAGGA
CACAGTTGTA CTACACGCA ATGCAATAC CTGCTGCAA AATGTTGTT TGTCTCAGC AAGCTTCAG AAGGGGAACA
AATCTTATCT GGTGGAGTGT TTAATAAGCA GAAAGCCAT GATGATATTG TTACTGAGTT TGGTGATTCA GCTTGCTTTA
CTCTTT

SEQ ID NO:579: (Length of Sequence = 374 Nucleotides)

GTGGGCCTGC TCTGGAGTCC ACATTCTGTA ATATTATGCT GCAGTAAATA TTAATCTTGA GAACTAGGTG ATATGGTTTG
GCTGTGGCCC ACTCAAATCT CATCTTGAAT TGTAGTCC ATATCCCA CATATCATGG GAGTAACCTG ATGGGAGGAA
ACTGAATCAT AGGCGAGTA TTCTATGCT GTCCATATA TAGTGAGTTT TCACTATATC TGCTGGTTTT ATAAGGGCT
TTCCCCCIN CCTTTCCTCT GCATTCTCT TTCCGSCAT TATGAGAGGA AGGACATGTT TGCTTCCCT TCTGCCATGA
TTGTAAGTTT CCGAGGCCT CTGAGCCAT GCTGAAGTGT GGAATTTAAT TAAA

SEQ ID NO:580: (Length of Sequence = 396 Nucleotides)

CAGAATAAAC ATTACTATT AGGAGAGTCA AATCATTTAT TTTCACATGA AAGAGATTAA GTAAAGCAGA ATCTTTGATG
GTCGCTGIG AATCTTCCG AGTGATTGAG AAATTCTGA AAACCACTC CAAATCAATT ATAATATTAA GTAAACTTTG
GCTTTAGGAG TAAGAGAGAG AAGGTCTGG TCCATGTTGG GAAAGAATAG ATATGCCAC AATAATTAGT CTATTACTTG
TTTGAAAAGG GTGATTTCT CGTCATTCA AAGTATTAG CAAATAAGGA CATATTGAGT ATGTAATTCA TGGAAAANTA
AGNAACTTCT TACAGTATGA TTCTAAAGG ATTATGGATG CCATTATCCA TTTTGGAGTT GGTATTGAAG CTTATC

SEQ ID NO:581: (Length of Sequence = 449 Nucleotides)

CTGCTCGTG GCTGTTTCAA AGACTGGCG AAAGGCTGTC CGAGGGGAG ACCAGGTGCC TTGCCGAGA GAAACACCA
NAGTCTCCTG TTGCTCATA AAGAAGTTTT TGGGATGGGA GAGAATCCAG ACCATCTTGG GGCAGCCAG CCTTGCTT
CATTTTACA GAGGTAGCAC AATTGATTCC AACACAAAC TCCTTCCCT TTTTAAAATG ATTCTGTTC TAATGCCATA
GATCAAAGGC CTCAGAAACC ATTGTGTGTT TCCTCTTTGA AGCAATGACA AGCACTTTAC TTTCACGGTG GTTTTTGTTT
TTNCITATTG CTGTGGAACC TCTTTTGGAG GACGTAAAG GCGTGTTTA CTGTTTTTT TAAGAGTGTG TGATGTGTGT
TTTGTAGGAT TCTTGACAGT GCTGTAATAC AGACGGCAAT GCAATAGCC

SEQ ID NO:582: (Length of Sequence = 261 Nucleotides)

CCAGCAGGTC GTACTGTCAG TGGCAGGTC CCGACAGGG CCGCTCAGT GTGCTGAGCT TGGTGGCGGG CACTGGCTTG
GACAGTGGCA TGACCCGAGG GAAGTGGCG CCGAGGGCC TCAGGGGCT GAGCAGTCC TTGCAGAGG GCGGGAACGG

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AGGAAAGCAG GGGTCTCAAT TCTGTACGAA AGAGGAGGGT GTTTTACTTC CTGGAATTAT AGAGGCCAGA GGTGTCTCTT
 TTTCAATTTA TTGGGAAGGT TTATTTTAAT ATGGACTTAG AAATAAATAA CTTATTAAAG TGAAGGTTCA CCTGGAGCCT
 TAGGCTGGCT GCTAAGTGTG AGTCTGGGCT GTTGAAGGGA CTGTCGTTT CINTGGGTC TCTGTAGGAG TTTGAAGGAG
 AAGACTGGCC CCAAAGGGTG TTGAACAGG TTAGATGTGC CCATTGGTTA GAACTTACTT GGATAGGGAG AAGGNTCTA
 GGGCGTATCC ACAAACTT

SEQ ID NO:572: (Length of Sequence = 375 Nucleotides)

CTATTTCCAG AAGTGACAGC ACAAGTCTGA GTTGCTGTTT GGTCTGGTGA CCTCAGACAC ACTAATTGGA ATTGAAAGCT
 AAGAGTAAAA ATTINCTGGT TACAGGCGAG TCATCTCTT GCAAGTAGTT AGCAAAGGGA GGCCCAAATT CTCAGGTTG
 TTGATGGGGA ACTTGCCACT AAGAGAAGGC AGAGAGGTCC CTAGTGGGTA TATTINCTGC CAGGCCACTT GCCAAAGAAG
 AGGAACCACA GAAAGAGAGA CATCATGACC NGGAGAAAAA TGTGACTAGA CATGCTAACC TCCAGGINTT TATATATGAC
 TTGAGTCTGC TGTAAITGGC AGCAGAAATC CAAAATTGT ATGGGTAGAC CACAA

SEQ ID NO:573: (Length of Sequence = 396 Nucleotides)

GAATCCCCAA AGGAGAGGAG CTAACCTATG ACTATCAGTT TGATTTINAG GACGATCAGC ACAAGATCCC CTGCCACTGT
 GGAGCCTGGA ATTGTGGAA ATGGATGAAC TAAGAAGCTT TGAGGCTACC AGGCAGGGGA GTCCCCCTAC CCACAANCTC
 TTCCCTGAAA GNAATNGAGG GGAAGAGAG GTAGCAGCCA GAGCCAGGAC CCAGGTTGG GGCTGCCGGC TGACCCGGAG
 CCOCTGGAGC AGGAGGCTGG GGCAGAGGGC CCTAGGCCAA GCCCACCTG GGCACAGGG ACAATCCTCT TCCCCACCAC
 CGGCCCTCAG GCTGGCATCT CTGCCCCAG CTTCCAGGAG GGGCCAGACA GAAGCAGCCA TTTGGCATCT CAGGTT

SEQ ID NO:574: (Length of Sequence = 373 Nucleotides)

CTAAACAGAT TTAACCTCCT CCCAGCAATC CAGATTAAAT TAATATGCTT TCTTAACGGC ATTCCGCATT TINTATTAA
 GCAATGAAC GTCCATCCT CTCTGATAAA TTAGGGCAAA AAAATTCATA TGTTTAGGGC ATAGGGAAGG AGGAGTTGTT
 GGCTGTAA AAAGAACA AAAAAAGTA CCGCAATGG CGTTTCAAAG TCTAGACATC TTCATCATCA ACACAAACAT
 TCCTCTTAC AAAGGGACCT CAAGTAACCT TAGGCTGGAG GACCCACCTG CGTATGTTTT TINTCTCAT TTTCTTTAC
 CTTCCCTCCA GGCCACCAA CCCACATCA GTGGCCCAAG TCACGTGGGG TTT

SEQ ID NO:575: (Length of Sequence = 431 Nucleotides)

GCCCCATTA CTTCTTTG TGCTACCACA ACAAGGATA TTAGCCCTTG AAATTAAAGA TGTGCTGTC CCAGTTGTGC
 TTGCTTCAC CTAATGTCAT ACAGTCATAT TCCAAAGAC TATATATTAG TGATATCTAT ATAGTTCACC CTTATATAC
 ATGAGCTCCC GTGTGTGGAG TGAACATAATT GCAGATATAA AATATTGGG AAAAAATTC ATGTGTACTG AACATGTATA
 GACTTTTTTN CTGTATCA TTCTCTAAAT AATACAGAA AATAACCACT GTTTACATAG CATTTACATT GTGTAGGTA
 TTATAAATAA TCTGTACATA ATTTAACTG TACAGGAGAA TATGGCATAA GNCATATGTG GATACCACAC CATTTATAT
 CAAGTACTTG AGGCCTCTGC AGATTGTGGT G

SEQ ID NO:576: (Length of Sequence = 410 Nucleotides)

GATGCAACA GCCCCAAGGA GGGAGGTGGA AAGGCCAAGG GGCTTGCCCT CTTGCAAGCG CGCCTGTAAA CAAGTCCCCG
 TGGGGTTTIG GGAGGTGCGC CCACATCTAA GACTGTGCGC CTTGCACTCC CTCTGGATGG CTGCGGAAT TTGGTCTTCG
 CTGATACCA ATTCTGGAAG GGTGGAGAGA CAGTTGGCTG GACAGCTGCC TGATTGGCC ATGACCTTC ACGGTGTCT
 GTGGGCCAAC ACCAAACGCC AGCCTGCTCT GCTGGCAGGG CTCTACCTG CACAGTCCCT AGGGCTGCA GAGCAAATGG
 GGACCTGGC TNCGGTCTCT TNCAGGCGC TTGGTCAATG ACATCACCAC TTTCTTAGGA CAGCGTCTTG GGGAGCTACC
 GGAACTTTCG

201

TTGCATTAA TTATGTGAT TTCTCTTCT ACCCTTGCT TAGCTAAAAA TATACCCCTT CTNIGTCCAT GGACAGGAGG
ATGGG

SEQ ID NO:565: (Length of Sequence = 196 Nucleotides)

CATCCACATC AGGCAAAGGC AAAGCAGGAC CTGAACCTCC CACCCCAAGC CCTACATCCA TGCAAGCCAG ACCAGACTGG
GTCAGAGGCT AGAAGGGGTC TCACAGGNTT GCCTGGGGAA GCCTGGGCC AAAACCTGGC CCTNGCTCCA GCCCAGAGNA
CCCACCTGGG CATNAGACTT GCGGCAGGCT AGGGGT

SEQ ID NO:566: (Length of Sequence = 275 Nucleotides)

TGGAAAAAA GAGAAAAAA AATTCTGCTT CATTTACGAA TGTGCCAAA GGAGGCAAGT TTCAACTGA AAACAAAACA
TAAAGGTCTA TGTGGATGCA GCCAAATGTT TCTCATTTA GAAATCATC ATAAAAGGTG GCAGCACTTT TTTTGCTTGT
TAACATATT ACTTATACT GGCTGCACCA ACATTTATC TCAATTTTIG GAGTGTCTCT TCTGATCAAT CCTAAAAGCA
ACACAATCAT TTTAGAGGTT GCAGACTACA ACAGC

SEQ ID NO:567: (Length of Sequence = 349 Nucleotides)

CGCTCGINTG TCCCACACAA ATGTTAAGA AGTCACTGCA ATGTACTCCC CGGCTCTGAT GAAAAGAAGC CCCTGGCACA
AAAGATTCCA GTGCCCTGA AGAGGCTCCC TTCTCTCTGT GGGCTCTCT AGAAAACCAG CGGACGGCC TCCTGTCTGA
TACCGTCTAT AACCTTAGGG GGNCTGGG CAGGCAACT CATCTGGTG ATGGCTGTAG ATGCTAACAC TGGCCAATTC
AATGCCACAC CTACTGGTTA CCCTTGAGG GCATTTCTCC AGACAGAAGC CCCTGAAGC CTAGGTAGGG CAGGATCAGA
GATACAACCC GTGTTGTCT CGAAGGGCT

SEQ ID NO:568: (Length of Sequence = 368 Nucleotides)

CTGGTAACTT CCGATTGNN TTCTCCCGCC TCANCCCTTT CCAGGGGCTA TTCTCTCCC ACCTGCTGCC AGGCTTTTCC
CTGGCATCC TGTGTTAAAT GTCATCCGC CCTACTGTT ATGTTCTCCA CAGCACTGA ACAAGACCA ACATGCCCTT
TCACTICAAG GTTTATCTT CTATTAGTTT TCCAGAGTC TGCTTCCCTA GTGTCCATCT CCCTGCTCG AATGCCTCTT
GAGAGCCAGT GCTTGATTT TGGTCCNGT GGTATGGGC TGGCACATAG TAGGCAGTCA GCAGATATTT ATGGAACAAA
CAATGAATT TGTGTGACTA TAGTTCATTG TTCATAGTTC ATTCATAG

SEQ ID NO:569: (Length of Sequence = 328 Nucleotides)

TGTCATTAA TGCACAGCTG GGGCTCAGGA CACAGCTTTG CACACCCTAA GTNCTAATA AATGCTAGCT CAGGGCAGAG
CTTTGCATAC CCTAAGTACT CAATAAATGC TAGCTCAGGG CAGAGCTTTG CATACCTTAA GTACTCAATA AATGCTAGCT
CAGGGCAGAG CTTTGCATAC CCTAAGTACT CAATAAATGC TAGCTCAGGG CAGAGCTTTG CATACCTTAA GTGCTCAATA
AATGCTAGCT CAGGGCAGAG CTTTGCATAC CCTAAGTACT CAATAAATGC TAGCTCAGNG ACAGAGCTTT GCATACCTA
AGGTGCTC

SEQ ID NO:570: (Length of Sequence = 313 Nucleotides)

CCCTAAAGG CAGAGTGTCT TCTTACCTCC ACACAACCAC GCTAGCTCTA TAGCAGTGGT TCTTAACCAG ATGAAATGG
CTGAAATGAC AGACATATAT TTCAGAACCT GGATGGGAAG AAAGCTCAAT GAGATAGAGG AGAAGGTGA AACGCATCCA
AGTAAAGCAG TAAATGATC CAAGAGTTGA AAGATGACTT AGCCATTTTA AGAAAGAACC AACAGAACT TCTGGAAATA
AAAAAAATC ACTACAGGAA TTTCAATATG CAATGGAAG CATAAATAAC AAAATAAACC AATCTGAGGG AAA

SEQ ID NO:571: (Length of Sequence = 338 Nucleotides)

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SEQ ID NO:558: (Length of Sequence = 279 Nucleotides)

GGGCCAGGCG CTGTGGCTCA CGCCTGTAAT CCTAGCACTT TGGGAGGCCA AGGTGGGCAG ATCACCTGAG ATCAGGAGTT
CAAGACCAGC CTGGCCATGT TGAAACCCCA TCTTTACTTG TAATACAAA ATTAGCTGGG CGTGGTGGTG TGCGCTATA
ATCCAGCTG CTGGGAGGC TGAGACAGGA GAACCTCTTG AACCCGGGAG GCAGAGGTN CAGTGAGCCA AGACTGCACC
ACTGCATTCC AGCCTGGGCG ACAGAGTGAA ACTGTGTCT

SEQ ID NO:559: (Length of Sequence = 278 Nucleotides)

GAGAAAGCCA AGAGCCATCT GGAGGTGCCG CTGGAGGAGA ACGTGAACCG CCGCNTGCTG GAGGAGGGCA GCGTGGAGGC
GCGCACCATC GAGGACGCCA TTGCACTGCT CAGCGTGGCG GAGGAGGGCG CCGACCGSCA CCCAGAAAGA CGCATGCGGG
CAGCCTTCAC AGCCTTINAG GAAGCCAGC TGCCGCGGCT CAAACAAGAG AACCCCAACA TGCGGCTNVC GCAGCTGAAA
CAGCTCTTCA AGAAGGAGTG GCTCGCTCT CCTGACAA

SEQ ID NO:560: (Length of Sequence = 304 Nucleotides)

CAAATGTTAT TGGAAGTTAT CTAGAAGGCT CAGTAACCAG AACITCCTTT CATTCTGCTT TTCTTTTCT TTTTTTTTTT
CTTCTGAGAC AGTCTGGCTC TGCTCTCCAG GCTGGAGTGC AATGGTGTA TCTCAGCTCA TTGCAACCTC TGCTGCCCGG
GTTTGIGCAA TTCTCTGCC TCAGCCTCCC GAGTAGCGGG ATTACAGGCA CGTGCCACCA CACCTGGCTA ATTTTTTTTT
TTTTTTTTTT TTGTATTTTT AGTAGAGCCG GGGTTTTCAC CATGTTGGCC AGGCTAGTTT CAAA

SEQ ID NO:561: (Length of Sequence = 323 Nucleotides)

GATGGTAAAC ATAAACCCAA ATATATCTGT AATTACATTA AGTGCAAGTG AACCAAAACA GTTCAGATAA AAGACAGTAC
CTATTTTATA GCATTATGAC TATCATGAGG TAATATATGT AGAGATTAGA GTACACATGT CATATTAGGA GGTGTGCAAT
AAATGATACT TTATCTGAA GATTAAACATA ATTCATACTT AAAAGGATCA AGAACTAGAA TATTAAAAA NTAGAATGTG
AATGTTTCTG CAAGTTTGA TAAGAACAAG CCCATAAATT AATCTCTAAT TTGCTACATT TAGGGAATAT GGGTAATGAC
TAC

SEQ ID NO:562: (Length of Sequence = 214 Nucleotides)

TCTAATNAGG CCCTGCGTGC TGTGTCATCC CATGGCGGAA GAAGGAAGGG CAAGAGTGGG TGAGATTGTN AGCACGAGAG
AAGGCTGAAC TTCATATTTT AACAAACCCAC TTTCAATGAT AINATAATCT TCGCATTTAT TTTTTTCGGT CTCCTCATGT
NCTCTAATTT TTCTCTGGGN TTTTGGTCTT TTGCTTCTTC ATTTTATAGAA GCTC

SEQ ID NO:563: (Length of Sequence = 358 Nucleotides)

TTTTTTTGT GAGAAACAGA AGCTGAATAT CCTGATTGTA TTGCCACAC AGGCGTTCAA TGGCTTAGCA GTGCTAAAGA
TTTATTTTTA TTTTTTTGGG CTCTGGGCTG ACATTGGAAA TTTTNTGAA TGAGAAAAAC CATCTCAAC CACTGTTTTT
TAACACTGAG TAACTTTGA AATTAACTTT TGCCACAGAC TTGAAAATGT TTCTTAATGA ATTTGACCTG AAATTACAAG
GTACAACAAC ATAATATGGT AAATTCATTT CAATAAAAC TAAACTTAA GATTGTCAAG CTGCTTTATA TACTTNTGT
GCTATGAGAA GTCAAAACAG CGCTGTATTG CCAATCC

SEQ ID NO:564: (Length of Sequence = 405 Nucleotides)

ATGTACTGTG TGTTTCATAC ACATGTTTCC TTTAGTCTTA AAATCTGGCT CATGGGGTAA AACTATTAT AATCTCCATC
CTCCAGATGA GGAAAGTGAG ACTTAGAGGT TAAGTACATT TTAGGATAAA GTAGGGTATT TCGATAAATG TTTCAAATGT
GTTTCTGGTC TCTGAGGACT AACTCCCGAG GCTGCTGGGG ATACAAATA CCTTCTTTT ACCATAGGAG CACTTGGGTA
GAATATTTGC AGAAACAATA AACTGGCTGA TATTTAAAGT TCTCTTCAGC TCTGACATTC TATAATTTCA TTGACCCTCT

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GCTGTGTCTAG GGCTGCCATG GGCAGGGCCG TGCTGGCTCC CTGGCCCACT GGGAGGAGGG TCTTCCATGG GGACGGACTT
CAGCTGAGAG CCATGCCCTG GGAAATGTAC CTTTGGGGTC CACATGTTGG AAGATGGGGT GCTGTGAAGG CCACACC

SEQ ID NO:552: (Length of Sequence = 334 Nucleotides)

ACAAACTGAC AAGAGAAAAC AAAGAATTCT TTGGTGATCT GGACACGCTG ATGGGGCCTC TGACCCAGCA CAGCAGCATG
ACCAATCTTG TCCGCTACGT TCGCCAAGGA CTGINTTGGC TGCGCATOGA TGCCCACTTG TTGTAGTGGG TGTTCTCAGA
TCTCTAGCAT CAGACCCAT CACTCTACCT CTACCAGCGC ACTGATGGTC ACTGGTGGAA CTCCACTCAC TGGGGAACGT
TCCTTTTGGT TATGTTTGT TTTATGCTTC TTTGTTATC TGTAAAAAC AGAAGTCATT GTAAGTTGAC ACTACAACCT
AAGGGCAGTG TACG

SEQ ID NO:553: (Length of Sequence = 371 Nucleotides)

GAAAAGGGGA AAAATCACA TATGTGTTCT AGACAATATT GGTITAGATT TTTTAAAGAT CTAAAATTCA ATTATGGAAA
GCCAGCAGCC TGATCCAGTT ACTGTGACTA AAGCAATTGT CAGACCATCT CTAGTCAACC CCTTATGGGT TTGCAATGT
GTCTACCCCA ATTTTGGATC AGGAGGGGTC AAACAGAAAT ACAGCAATGT GATTAACTG CTCTTTTGA AACAATATGA
AAAGGTTTGT NCTTTCAAAG TAGATTCTAA CAAATCGTCT GCTCACTGTG GGGTAGCAAA GNGAGAAAAG CAAATCTTTC
TATTAGTCTC AAGCAAGTCT TCAGATTTAC ACACAATCTA ATGGAGGCAT C

SEQ ID NO:554: (Length of Sequence = 331 Nucleotides)

TTATGACTTT TTTCAATAAG GCTATTGTAT CAGCCTGINC TCTCGTCT AATAACGACA TACCAAGAC TGGGTAAATT
ATAAAGGAAA GAGGTTTTAT GGACTCACAG TTCCACATGG CTGGGGAGGT CTCACAATCA TGGCGGGAGG CAAAGGAGAA
GCAGATCAC ATCTTACATG GCAGTAGGCA AGAAGAGCAT GTGCAGGGGA ACTCCCTTT ATAAAACCAT CAGATCTAGT
GAGATTTATT CACTATCAAT GAGAGGCAGC ATGGGAAAAA CCTGCCCTC ATGATTCAAT TACTTCCAT TAGGTCCCTN
CCACAATACA T

SEQ ID NO:555: (Length of Sequence = 305 Nucleotides)

GCTGGGACTA CAGGCGCCCG CCACCACGCC CGGCTAATTT TTTGTATTT TAGTAGAGAT GGGGTTTCAC CATGTTGGCC
AGGATGGTCT CGATTTCTG ACCTCATGAT CTGCCCGCCT CGACCTCCA AAGTGTCTGG ATTACAGGCG TGAGCACCGC
GCCAGCCCA ACACATGGTA TTTCTGTCA TTTTCATTTA GTCTTCTGGT TGCTGTGTA TGGTCTCAGG CTTTATTTAC
ATTTCTCCGA TTACTAACAG ACTTGAACAT TTCAGCACAC TTTTLAGGTT ATTGAATAAC CCTA

SEQ ID NO:556: (Length of Sequence = 318 Nucleotides)

CTTTTGGT GATINCTAAG CTCGTITTIN CTATCCTAT ATATATATGT GGTGGTTTT NATTTTAGGA TTTTAAAGTT
ATCCCTAATA AATTTTGAGA TGTGTCCAT AGCTAGCCTG TTGAGATCT TTNATATCAA AAGTTAATAT CTGTGGATTT
NTAATCATTC TTTCTACATA TTTAACAAAG TCATTAGCAA AATATGAAC AAAACCTGTT ATTCATATCC TTAGATACAG
AACATCAATA TCCTGAGATA CAGTACATCA TCAAAATGTG GTCCCAAT GNGCAGCAAT TAGCATCATG TGGGAGCT

SEQ ID NO:557: (Length of Sequence = 349 Nucleotides)

GGAAGCAATG TGCTTCTTCT TAACAGAGAT ACTGCATAT TCTCTATGTA TACTCACTTG ATGGCATGGT ACATGTCCTC
CAGGATGTCT TGCTCAAAGT CCTTGCTCC ATTCACACCT TTCAGATTTT TGCGAACTC CTAGAGACAG GCCAGTAAGT
TTTTTCCCT TGTGTCAACA CTGAAGCCCC ACCTAAGGAA CTCTGGGTT TTCAGTAAAT AGGACTTAGG AAAAGGTAAG
CGAAAAACC CACTTCCCA CCCCAGTCCC TTTCTAGGT TGGGCCAGC CCTTCCTTGA TTCCCTTGGA CAGAACCCCA
TCCATCATGC CCACTGGAAT CCTATGTCC

SEQ ID NO:545: (Length of Sequence = 342 Nucleotides)

GGGCTATTAC CTCGGGCAC TGGGAAACT GGGAGACGGG ACAAGGGGTG ACCAATTTTT CAGTGTATGC CCTTTTCGAA
GTGTTAAACT TTTTTTTTTT TTTTTTGAGA CAGGNTCTCA CTCGTGGCC CTGCTGGAGT GCAATGGTGA GATCGTAACT
CACTAAAGCC TCAACTTCCT CGGCTCAAGC AATCCTCTCA CCTCAGCCTC CTGAGAAGCT GGGACTACAA GTNTGTGCCA
CCATACCTGG NTAATNITA AAGTTTTTGT AAAGATGGGG GTTTTCGGAT GTTGCCCAAG CTAGTCTCAA ACTNCTGGGC
TCAAGTGATT TGCCACCTT GG

SEQ ID NO:546: (Length of Sequence = 280 Nucleotides)

CTCGTAATGC CAGCATTITG GGAGGCTTGA GCGGGGAGGN TCCCTTGAGC CGAGGAGTTC GAGATCAGCC TATGCAACAC
AGTGAGACCC CTATNCTAT TTNATTAAA AAAAAA AAAAGGGGTC ACGTTTACTG CCACCATCCC AGGCAGAAAG
ATGAAGCCTA GAGCCTCTCA CTGCTTCTTA GTGGGTCTTG GGTGTAAAT TGCTGTCTTG GGTATATTTT TTGGCAGAAA
GCATCTGGCA TCAGGCACTG GTTCTCAAAG TGGGCCCC

SEQ ID NO:547: (Length of Sequence = 298 Nucleotides)

CTAAAGAGTT TCACATAGTG GCTCAGTCCA GCCTTGTTGG GATCTTGCCG GGGCTTGGG CCGTGGTCC GGGCCTAGG
GGGATGCTN ACCAACAGAG GCTCTNCAGG CTCTGAAGAT AAGCTGAGGG CAACAGTGA CAGAGGGGGC TGAACCTGCC
TCAAGGAGGC TCTTATTC AAAGCAAGTCT TGCTGGCTTC TNCAGAGCT GGGGACCACG TGGCCCTTTG GCCAGCCAGG
ACCAGCAGCN CTNACCACCT GCTGAGGGGC AGTTTGGGTC AGGGGGGCA CATAGAGG

SEQ ID NO:548: (Length of Sequence = 311 Nucleotides)

GAGACAGGGC TGTTCTGTC ACTACCTGG TCATCTGACC AGCTTTCTGC AATGCTAAGA AGGTATTCTT TGACCAAAAC
GCACTCCACA TACAAGTTTA AAAGGGGCCC TGTTTATGTA GGAACAACAC TGAGGTGGTG CGTAGCAGGT ACAAGACGCC
CAATATTTT CAGTTTATCT TACGGCTGGA CTCCTATTCT CCCACACTGT TTCCTAAGA AGGTCCACAT TATTTTGGNT
ACTAGCCTAG TTTAAGTGA GATACTGTGG GCAACTTNA AGAAATGACA TCAGGCACAC AGGCTGAGCT T

SEQ ID NO:549: (Length of Sequence = 387 Nucleotides)

TTTATTTTGG TGTAAGACA GGAAGCTGGA AAATACACTG TATTTAAAT TTNCTTGGTT CCCCCACACA TTGTGGAAAC
CCCCCCCC CAGAGCTAAT CTGTTCAAAC TCAAATACIT AAAAATTACA GCAGCCAAAC AAAAGCATGG GGGAAAAAAA
AACAAAAACA AAAACCAGAT GGAGAAGTA GCCTGGGCCA GTAGTGTAC TTGGTGTGA CAGCTGAGGT GCTGAACAGG
AGCTTCTGTT TCTGTTTTT TCTTTCTTT CTCTCTTCT CTTCAGAGAG GGGATCTNGA AGTAGCTGGG TGTGTCCAGT
TTCATGAAGG CTGCTCAAT AGCTTGGCTG AAGGAATTTT GAAAACTNGG CACAGGAACA CGGGTTT

SEQ ID NO:550: (Length of Sequence = 377 Nucleotides)

CACCCCAAC TCTTACCAA GTAGGGGCCC TGGCTTGCAA TTGCAGAAGA GCTTTCCCAT CCTGGGTGA GCATACCTAC
TGGTAGTGGC TCCGTGATTC CTTGGGGAGG GGCTCCAGA GGTAAACCAAC CAACCTGTG CTACTGCTAT GACCACAGTT
CTGCTTCTGC TGCCCTCAA CTGGGGAAGA AACAAAGAGC CTGAGGGCTT TACTCAGCT TCTAGCACTA CGCAGTACC
ATATAAGAG GAGCCAGTC TCTCTCTT GTGAACCTT GACCCCAAC TCTTACCAA GTGGGGCCCC CAGCTTGGGC
CAGCAGACA GTGGCCCAA CCCTAGGCT GAACATTCCA GTAGCAGCTG CTCGCG

SEQ ID NO:551: (Length of Sequence = 320 Nucleotides)

GAGTTTNTGG TGAGCCGAGA TCAGCCATT GCACTCCAGC CTGAGCAATC AGAAGGTCC GGCTCCTGTT GCTGAGGAAG
CAGCTCTGGA TGACCTCAT GATGAAATTT GCAGCCTGCG GCTCAGTCAT GTTGGGGCTA AACCTGTGCC TGGAGGAGAG

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CATGTCATAG TGGCCTGCTC TCCTAACACA GCACAATTTA GGGCATATTT TCATGATGGT CTATCACTGG ATTACAACAC
 ATCTCTTCAT TAAAGTCTTG GGAAAGAGGC TTCAACTTIN CTGTGTGAG AAAACTTCAC AGGTGTGTAA AGTTTGATCA
 GTATGTATAA TATATTINAT TACATATATT TNAITTTINAT TTTTCATTTT TTTGCATACA TAGCAGGTGT ATATACTTAT
 GGGTTATATG AGATATTTTG ATAAAGGCAT GCAATGTGTA ATAATCACAT CAGGGTAAAT GCAGTATCTA TCCATCACCC
 CAAGCATTTA TCCTTTGIGT TACATACAGT CCAATTACAC TC

SEQ ID NO:540: (Length of Sequence = 416 Nucleotides)

CACCAGGGAG AACCAATACA ACAGAAAAA AGCAGAGAAC AGCTATGTGT CCTGCCAGGT CTACCAAAGA TAGTCATCCA
 AACATGAACA GATGAGAAGG CTGTTTTTCA AGAAGGTGAA AGTGACAGAN TATTCAATGA ATCTGAACAC ATGAAGATAC
 TGAGACACCA GTAGTTTCAGC AATAAGTGGG GAGAAAACTA AGCAAATGAG AAACCTTAGGA ACAATTATGC AGCAAAGAAC
 AACTGGATAA GCTGAAAAGT GTTTAAAGAT GCTGCCGTAA ACACCTAAGTA TCACAATCAA ATCTGTATTT GTAAAAATAG
 AGGTATGGGA AGGGTACANG TATGTTTGTG GGGCAAAATG GTGAGGAGAG CTTAAACCCCT CTCTCTCCTT AATGAGGAAT
 TAAATAATCC CATTAA

SEQ ID NO:541: (Length of Sequence = 341 Nucleotides)

GAAATACTTC CAGGCCTTCG AAAGGCCATC CTTTGACAC ATGTAAAAAG CTGTCTGTGT GGCCCGTTAT TCCACTGAC
 CGCTCTGAGT GATCACCCAG GAGCGGGCG GCAGCAAGCA GAGCTCACCG GATTTGGGAC AAGGATTTTA AAGGCAGCTA
 CAAAGCTGAG CTCATTTTGC TGATGATAGT CTCGTTCAG CTGTTTAAA TGACTGTCTG ACTCACCATG GTATTTTINC
 ACAAAATAAA AACACATTTT GGGTTGTGCA ACAGTGGTTC TCATCTTCC AGGCAGGCAG ATTATTTTAA TGCTGTTTAT
 ACAGGGAATT GGGACTCTCG G

SEQ ID NO:542: (Length of Sequence = 334 Nucleotides)

TTGTGTTC CTACCTTAAC CAATACCTCC TGGAAAAAG AGGTATGGT ATAAAAATA ACCATACCCA AACATTCCCA
 CAACATGACC TTAATAAGCT GGTGCACAGT AGATTATGGC AGAGGAAAGA AAATTGACTT TAGAATTAGA GAAACTTAGG
 TTCAAACTTC AGCTCTGTCA TGCTTTGGTT GACCTTCAGT AAGTCCATT TNCTTCATCT GTAAAATGGG AATAACATCT
 ACTCCACAGC ATCATTAGAA AGATTAAATA GTGGCTGGGC ATGGTGGCTC ATGNCCTGTAA TCCAGCACT TTTGGGGAGG
 CTGAGGTGGG GCGG

SEQ ID NO:543: (Length of Sequence = 350 Nucleotides)

ATTGTTTTGC AATGACAAC ACCTCATTAA TTGTAAGCCC AGTGACACTG CTGTCTGTGT CAAGTCACIT TTAATTACA
 CACGTGCTAC TTAATCTTAA AAGCAAAATT AAACATGGGA CTGGTTTACA TTTCAAGCTA CAATATGGAA CCATTGTATT
 TGGAGGAATG AGTTAATAT GCATTGTAAA ATAAATTAG GGGGTACTTT GCATTACAG CGGCTTATGT AATTAGGTTT
 AGTCAACTGT AATGTTTCAG GTTAATGTCT TCCATGGATG TATGCTGTGT AAATAGTGAA CTTACATATC CCTAATACA
 TCTGAATTAT TACATAAATC CTTAATATTA

SEQ ID NO:544: (Length of Sequence = 328 Nucleotides)

GGGAGACGAG AACTCTTGAG ATCOGGGGTC ACCTGTNAGT CGCTGGACCC AAGGGGGAAG CGTCTTGATT CCTGGAGGAA
 ATCTCOGAAG TGATGTGTAA CCCTGTGTGT CGCCTGCACT TCGGCCGCAA CTGCCCTTGG TTCAGTCCCC TGTTCTGTGA
 GGAGGCGGGG ATCATGTAA AGTGGAGCAC ATCGTCCCG GCTTGGACGC CTTTACCTT TAAGTGTTC TGATTAGTTT
 TGGCTTTGGG TCTACCAAGA ATTCTAGTCA GTTAAGTAGC TTTTAAAGCC AGGTTCTGA ATTGGTAGG CATGGACACT
 CCCAGTAG

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GTAATTCCAT GTGGCTGACT GGGTAACAGA TTTGAAGGGT ATCAGAGACC TTCATGTTGT AGTCATCGC AGTGTATTGT
TTGTTGCTTG TCTCTGTCTC CCGTTGTATT GCCATCCTCA AGGGCAAAGA CTGCATCTTT GTATTCCCAG CTCCTAGGCC
TGAGTCAGGC ACATAGTAGG AATTCAGAAA GTATGTTTIG GATGTAACAT TCTCCTTTT TCTTGACAA AATGGCCTTT
TGTCGGTGC ATGTCTCTTT CCATAGAGGA GGGGTTGGG CAGGATTGTA AGATGACTGT GTTTGAATCT TCAGTTAGCT
AAGACAAGGA TACGTTTCTT CCATGGTGCA AATCTAAAGG GTTCTAGTGA GGTTGGTTC

SEQ ID NO:534: (Length of Sequence = 374 Nucleotides)

TTTTTTTTT GTCCAAGGTT TATCAAATTA ATTGATTTTG GGGGGCAAGA TAAAAATTTT NATTTGATTA ACTTCTCTA
TTGGTTTTTG TTTCAATTT CATTTATTTT TCTTTTATC TTTATAATGT NCTTACATCT GCTTGGTTTG GCGTGGGCAC
AGGGGCTCAT GCGTGTATC CCAGTACTTT GGGAGGCCAA GGTGGGCAGA TCACTTGAGA CCAGGAGTTT GAGACCAGCC
TGGCCAACAT GGCGAAACCC CGTCTCTGCT AGAAATATAG AAATTGGCCA GGTGTGGTGG CCAGCACCTG TGATCCTAGC
TACTCGAGAG GCTGAGGCAG GAGAATGGCG TGAACCCGGG AGGGCAGAGC TTGC

SEQ ID NO:535: (Length of Sequence = 433 Nucleotides)

TGCCGACTGA TTCCAAGTCC CCAGGAGGCG TGTGAATGCT AATAGATATT TGGGGTTTAT CTACATGGAT AAATCAGAAT
TGTTAACATT ATTTATAAAG ATAATACTTA CATAATTTTN AAATTCACAA AGATTGTTTG GCITAATGAT TTCTAAATGT
ATGCAATATA ACATTAGGCG GCTTTTATTA ATTCTATTTA TGTAAATGAA AAGCTCAATT CAGCAAAAAA CAGATCTGAT
GGGATTTGGT TATTCTCTAC CTGATCAGAA CAAAGCCTTA CTTTACATTC CTGACTACCG ATTGGCTGAG GGATTGTCTA
ATAGAATGGA GCTTTCTTTT GAGCGGTATC CATGTGTACA AAATTGGGCT GCITTACCTG TGACCCACGG ATGTCTGGAG
GAGCTTGA AA ATGTAGTCAG CCGTTTCTTT TGG

SEQ ID NO:536: (Length of Sequence = 438 Nucleotides)

GATGAATTAA GAGGGAAATT TATAAAGTAA AATCTTTAGC GCTGTTGATC AAAGAGTTCC AGGCCGGGCG TGGTGGCTCA
TGCTGTAAAT CCCAGCACTT TGGGAGGCTG AGGTGGGCAG ATCAGAGGT CAGGAGATCA AGACCATCCT AACACGGTGA
AACCCCATCT CTACTAAAAA TACAAAAAAT TAGCCGGGCA TGGTGGCAGG TGCTGTAGT CCCAGCTATT TGGGAGGCTG
AGGCAGAAGA GGAATTCCTG CAGCCCGGGG GATCCACTAG TTCTAGAGCG GCGCCACCG CGGTTGGAGC TCCAGCTTTT
TTGTTCCCTT TAGTGAGGTT TAATTTGAG CTGCGGTAA ATCATGGGTC ATAGCTGTTT TCTGTGTGA AATTGTTATC
CGNTCACAAT TCCACACAAC ATACGAGCCG GAAAGCAT

SEQ ID NO:537: (Length of Sequence = 316 Nucleotides)

TAGTAGCACT AAAGCCCGT TTTGGTCACA CTCTCACCTA GGTGAGAACC TGACCAAAAA TGTGGAATTA TTAAACAAAA
TGATGGGAAG CCAATGTTCT GAAACTGAGC TCTTGCACTA GGCCCCCACA GACCAAAATTA AAATGGAGTC ACTAGTGCTA
AATGCTTTGG AGTCAAAACAG AAATGTTAAA GAAGATAGAT CCCAAAACAG AGCAGTGTTT TATTTTCTC CAGAAAACAG
GAGATTCCAG CATAATAAGA AAGTCTCTC TGTGTGAACC CTACAAAAA AGTAACCTGA AGTAACCATT TTTTTT

SEQ ID NO:538: (Length of Sequence = 303 Nucleotides)

ATCTTCATGG GCGTCTAAC TGTAACAAAA ACCCCACAAT TTGAACAGAA GAACAGAAGT ATCTGGTTAC AGAAGTGCAT
TCATACATTT CACAAATGTT TCAGTATCCT CTCTCCCCG ACCCCAGCAT GAGCTTTAAT TGGATGTATT TATCTTTTCA
CCAGCATGCC CATGAAGGNG CTAAGGAAAA CATTTACCAA GTCTGTTTCA AAATCTGTCC TTGGCATATC AAATTTTTTC
TCTTCTTTT TCATGCTTTT TTTTAAAAA AAAAACAGGA GAAAGCGAAT AGAGAGGAAA GAG

SEQ ID NO:539: (Length of Sequence = 362 Nucleotides)

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TTTGAGTTT TACATTCCCC TAGTACATCC CTGCTTACTC GGGAGCACAA AGCTTGGTIG TAAGAAATTG TGATTGGAA
GTAGAGAAAA GCAAGGAAGT CCAACCTCAG GAGTGTCTCT GTTACTAAGA GGAGAGTGAG ATCCAGGGTG TGGGAGATGA
TCTGAAGGTC TATGGGTGGG GAGTGCCACA GGAAGAAGGG TTCTGGTGG AGTTAAAGGA GGATATATCT ATATNCTGGG
AGATGAGCTG AATTGAGAAC ACATGGAATG GGAACAATTC TCCCCATACT GCGTTTAAGC CAAATTAGGC TGGCATCCCC
CACCACGGCC AACTAA

SEQ ID NO:528: (Length of Sequence = 482 Nucleotides)

TTTTACTCTA GCGTGAGGAG GGGGCTCTCT AAGGAAAGTC ATGCTGGGTA AACTGTGCGA TGTTACAGAG CACATTGAGT
CTGTGGTCAT CGTGGTTCIT CTATCTTCAC TGTCACTGT ATCTGTTCAC ACATACTCAG TTCTTAATTG TAAGCTCAAT
TTTGGTATTA GCAAAAGCAT CTGTGAGTTT TTCTCAATT ACTCACCTT CTCTTGCTT AAATAAAACA AAGAAACAA
GAAAACAAGT GTGGTGTCTT TACAGTCTC GGGAGTCTT CTCACTGAC TTATATATA TANAANAAG AATGCACATG
CGGGCCACGT TCACAGATAG ACAGATTCAC CCGAAATTGA GGAATGAGGG GCCTTAAAGG CTGCGANAA NCAAAATGGG
GTGGAAATTA GCAANCGTIG TTTTCGGTC AATTNCCAAT TGTGCACTGG CTGCGTGGAG ACAAGNCCAT CTCCAATT
CC

SEQ ID NO:529: (Length of Sequence = 412 Nucleotides)

CTCTCAGACA GTATCTCTCT CGAAGCAGGA ATCCTAGTAA ATCTCATCTG CGGCATGCGA TTCTAGTGC AGAGAGGGGA
CCTGGGTAT TAGAAAGTCC TTCAATATTT AACTTCACTG CAGATCGATT AATTAAATGGT GTCCGGAGTC CACAAACAAG
GCAAGCAGGT CAAACTAGAA CACGGATTCA AAACCCCTCA GCATATGCCA AGAGAGAGGC TGGGCTGGG CGTGTGGAGC
CAGGCAGTCT CGAATCTCT CTGGTTAG GGAGGGGAAG GAAGAATTC TTGGCTACC GGAAGAAAAG GGAGGAGAAG
TTTACAAGCA GCCAGACACA GTCTINCAAC GNCACCAAAG CCTCCGTGC CAAGCTTTC AGCTGGGGC TTTCCAGCT
TTCCCTCCAT TA

SEQ ID NO:530: (Length of Sequence = 301 Nucleotides)

ACTTTTAAAT AATAGTCATT TAAAGTGGGT GAGATAATAT CTCATTGTGG TTTTNAATTG CATTCTCTG ATGCTTAGTG
GTGTGAGCA TTGTINCAT TAACINCIG CCATTGTAT GTCTTTTTT TTTTTTTTT TTTTTTTGA GATGGAGTCT
CACTTGTCA CCCAGGCTGG AGTGCAGTGG CGCAATCTTG GCTTACTGCA AACTCCACTT TCTGGGTCA AGTGATTCTC
CTGCCTCAG CTCCCAAGTA GCTGGGATTA CAGGNGCCA CCACCAGCC CAGCTAATTT T

SEQ ID NO:531: (Length of Sequence = 312 Nucleotides)

CAGATGAGAC CAGGCCCTGA CAGTGGGGC AAGTCTTACC AACCTGCACA GCATATCCAG CAGGNAACT GTGGCTCAGC
AGGTGCCAAA TGGAGCCCAT GGGCAGAAGA TGCCACAGC GTTCCAGATG TGTTGGTCT GAGAGATAAA AGGACACAGA
ACAAGATGAC TGTGCAATA GCCAAGTGGT GGCAGAAGTT CTGCATTTC AAGAGATGAT CCACTCAATA ATTTGACGAT
ACTAGTTGGC CAACATGCTC AGAGAAAACA GNCCTATCCA CATCTGGAGC CTCATTCTCT CTCAGGATCA TT

SEQ ID NO:532: (Length of Sequence = 313 Nucleotides)

GCACAACTCT CGACCTTTGG GAGCAGCCAG GGAGGAGTCA CTGTCCAGC CCCCTGGCT AGGCACAAAG GGGTGGGAGA
GACAGCTGGG CCAATATGGT CTATTACGC CTGAAACCCC GCGAACCAC CCTTAACTCT GCCTTCAGGC ATATCCCCC
ACGTCCATGT CCAGGAGCCC CCTTACTGTC CTGGTCACT GTGGCCCGG GAATAATGGA GGAGATGGTC TGGTCTGTGC
TCGACACCTC AACTCTTTG TGAGTATGT GGGAGGGGCT GTGGGGGAG AGGGCGTNA GGCCTCGGA TCT

SEQ ID NO:533: (Length of Sequence = 378 Nucleotides)

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CCAAGACTGC TGATCTCTAA ACAAGCATCA AAACCCGAAG CTCATTAACA TCAGAGTGAG CTTCAATAAG GTGANCACTA
CAATGATGTA CAATTACATC CTAATANTTC ANIGCCCCAAG AGCCCTGTAG AACTATTGCA AGGCCCAGGN TTATCACAGT
ATGCAAATGC ACTAGGAAAA TCATTACCTA TTTAGTCCCC TTTATTTTGG TGGSTTTAAC ATGAGAAGAG TAATCCATGC
TACAAGACGA GATTTTCATT TACAGCTGTA GTAGCCAAGT GCATAAAAGC TTGANTCTGT CCCA

SEQ ID NO:521: (Length of Sequence = 360 Nucleotides)

TTGAGACGGA GCTTTCCCTG TCACCCATGC TGGAGTGAG TGGCGCTATC TCAGCTCACT ACAACCTCCA CCTCCCAGGT
CCAAGTGATT CTCCCGCCTC AGCCTCCCAA GCAGCTGGGA TTACAGGCGT GAGTCACCTG CCTCAGCCTC CCACAGTGCT
GGGATTACAG GTGTGAGCCA CTGCGCCAGG CCTCCCAAGG TGTITGGGATT ACAGGCGTGA GCACCGCTCC GGGCCTCCCA
CAGTGCTAGG ATTACAGGTG TCAGCTGCTG CACCTGGCAA TTTTTTGATA TTAGTCCCC TGAAGTCCAA AAAGAGATAT
ATGGCTTATT TGGTATAATG AAATCATACA GGAAGGCATT

SEQ ID NO:522: (Length of Sequence = 287 Nucleotides)

TTGAGGAAGT TCTGTGCTG GTGAGGAAAT TCINTTGAST TCTGTAGGAA TTTTATAGC TTGTTTTCGA TTCAGTTCTA
TCAACAAGCC AGCAGCAACT CAAAGGGAAG CCTCCTNCTG GCATATCAAT CACACAGGCA CATAGGATCA TATAGCATAT
AGGATCAGTC CCAAGAAGAA CTATNGGGIN GGGGAGAGGT TTTCTTCCA CTCTTGGGN TTCAGTGACT TTGAGATGGA
CCTCTTTTTT CCNNTGGACA AAATGTCATC ACACCAACAT CTTATTG

SEQ ID NO:523: (Length of Sequence = 318 Nucleotides)

CCTGTCTCT ACTAAAAATA CAAAATTAG CCGGGCATGG TGTACGTGT CTGINATCCC AGCTACTCGG GAGGCTGAGG
CAGAAAAATT GCTTGAACCT GGGAGGCAGA GGTTCAGAC AGCTGAGATC ACTCCATTGC ACTCCAGCCT GGGCAACAAG
AGCAAACTT TGTCTACAAG TCCTCTACG CTGACAGGTC CTCACTCACC TGAATCTTTT ACGCCAGCAG CGTCTCTTCA
CTGACGINCT TCINCATGCC GGAAATAGGA CCTTCCCTTG CCANCGGGA GTGCTGGCTG CATGCAGTCG TTACTTTT

SEQ ID NO:524: (Length of Sequence = 238 Nucleotides)

ATCTCATTGG AGCCAGGGTT CCAGTTCTCA TGCAAGTCGG CCACAGGAGC CACGGAACCG CAGTAGGATT TCTACTGTTA
TACAGCCCTT GAGGCAGAAT GCAGCAGAAG TTGTGGACCT TACCGTTGAT GAAGATGGTA AATTGAAGTA GTAACAGTAG
AAAATTATGA AAGGAGTTTG ATAAAAGGAA ATCTCTTAAT ATGCTAGAAA CTCTCTCTGC TTACTGGTAA TATATTAT

SEQ ID NO:525: (Length of Sequence = 168 Nucleotides)

CCAATGAGTG TGGACCTTAA ATTTAAACAG CTAAAGCTAT AGTCTAAGGA CAGTCTCAA TAAATACCTT TGAATTGTCA
TATGGTGCCC AGGAGGGTCT TGTGGAAGG GTTTCATGGT AGTGAAAGAT GTAATANTC TTTTTCCTT TTAACCCATA
GCCTGTCC

SEQ ID NO:526: (Length of Sequence = 387 Nucleotides)

GGAGTCA CA CGGTGAAACA GACACAGTTA TATACAACAG GGCAGGTTTT TAAAAAGAGT TGCTCTCAGA CGCATTTTTT
CTGCTCCCTA AAAAGCCGAG GAAGATACTG GNTCCACAGA AAGAAAAGGC AATGCCGTAA CATGAGGCC TCATGGCCGC
ACCGTCCAGG GGAAGGCTG TTAAAAACAC AAGTATTCTT GTGAAATACT TCGATCTGAG CATTAAGGCA GGTCTGCAGG
AGATCCGTCC TGGGGACTCG GACAGCAACG CTACCGGCTC CGAGAGGACA GTTAAATGTC GCCTCCCGGC AAGAGGGGCG
GAGAGATCAG ACAAGGAGTT GTTCTTGAST TNAAACCTGC TACAACAGCA AACTCCAATA AACTCAA

SEQ ID NO:527: (Length of Sequence = 336 Nucleotides)

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TTCCCACTGT AAAACCAAAG GCTGCAACTG TGAACAAATG TGGACTTCCT CAAAGGACAA ATGAGGAGAC TGAAGGCTAC
ATTTCTCTCT TTAGAAGACC ATTAGAGAGT GTCTACAGTT ATACAACAGG TTTCTGCAAG ACCCTGTGGG TAACTT

SEQ ID NO:515: (Length of Sequence = 416 Nucleotides)

ACAAACAAA AAGTAGTAGC ATCTCTGTGA GAGGTACACA GTTAGAAAA TGATTCCACA CACGAGTAAA GAGATTACC
AGGAAGAGTC TTGTTTTCTA AAAGTTGATA CAACTAGTAG AAAATACTT GTCAGTGGTA AATAGAGCAG AAGTAGAAAA
AGCAGTTAAT CTATTAGATC AGATCAGAGT GTAAGGCAGG TATATCAGGC CAAAGGTGAT AAGACAGAGC AGAAATAAAG
TATTGTTAAT TCATGCAITT NCTGACTCAT TTAATTATAC ATTGATACTG TCACTTATAA ATCAATCTT ACAGGTCAGG
TTCTGTGCTA AGCTCAGGGG NTATAAAANG AAATANGTCA CTGCACTCGC CCTCACGGGG GCCCACCACT ATAACGGGT
AGATAGTTCT ATAAAG

SEQ ID NO:516: (Length of Sequence = 368 Nucleotides)

CCCATGGAGC TCGAGAACAT CGTAGCGAAC ACGTGCTAC TCAAGGCCCG GGAAGGTGGC GGTGGAAATC GCAAAGGCAA
AAGCAAGAAA TGGCGGCAGA TGCTCCAGTT CCTCACATC AGCCAGTGGG AAGAGCTGGG GCTCAGCCTC GAGCGTGA
ATCACAGCCT GTGCGAGCGG CAGCCATTGG GCGCTGCTG TTCGAGAGT TCINTGCCAC GAGGCCGGAG CTNAGCCGCT
GCGTCGCCCT CCTGGATGGG GTGGCCGAGT ATGAAGTGAC CCGGATNAC AAGCGGAAGG CATGTGGGGG GCANTAACCG
CAGAATTTTC TNAGNCACAN GGGTCTGAC CTCATCCCTG AGGTCC

SEQ ID NO:517: (Length of Sequence = 393 Nucleotides)

CCCAGCGCCT GGAGAGCCAG CCCTGCAGGG TGGGCTGGGC GAGCCAACT GCGTTCCTGG TGCAGGGCTT CGGGTCTCCC
TAACAGACCT TATACGCTGA CCGCGGCCG CCATGGCAGT GTCTCTTTC TCAGACATCC AGGGAGGACC ACAITGCTCC
AACAGGGTC GCTCCACCAA TCCTGGGAGA AGCGAATCGT TTTCTCCGGG TGCCCTGTCA GCGCTCATG GTGCCAGAG
AGGAATTTTA GTGGCAGCAT TCGGCTGTC ACNCACCGA AATTNCCAGG CCACTCCAAG TCAGAAGGGA CCACCAGGAA
AAGTCAGGAA GAGAACCACC ATCAAGGTCC CAGGCTCTTT TTTGTGACA AGGACTTAGA GGGGTTTGGG TCT

SEQ ID NO:518: (Length of Sequence = 465 Nucleotides)

CCCTCTCTGC AGATAGAAGA GCCAGAATGG GAAAGCGAA GATCCATCAA CCTGTCTGAG CTCATTGATG TTTACAGTGA
TGGTGTGAA CTACTCCAGA TGGTGAAGGC ACCAGATTCC AACTGCAGCA ACCTTCTGAT TACAACCAGA CAAAGCCTTG
TNCCTCTCG GGGGCAAAAT CTGACACCTT ACTGGGCATT GAGACTTCAA GGCTGCGCA GCAGCCTACT CCTGGATATT
TCACTGATGA TCAGACATTA GACTTCCTTC TGCAGATACA GGATGGAGTT GGGATGAAAA AGATGATGGT TGTGGATGGT
GACTCTGGGC TCCATTGTTT GGAGTTACCG TGCTCGTTG TCACATGAAA GAAAACGGCC AGCCACCTCA GCAGTACTT
TCAGACCAGA AGTCTGTCTT TCCTCTTCTG GGGCCGAAGG CTTGTGAGT TGCACTTCC CAATT

SEQ ID NO:519: (Length of Sequence = 382 Nucleotides)

GGCGTGGT AACAGAAAAC TCAGTGCATA CTTGCTGTT GTTAGGTTGT CAATATAGTC TTTCTGTAGG ATGGATAGCA
TGTTTGAGAG GTGCCAAACA AGAAGTTTGG GGGTTAGTAG TGTTCTTGT GGAGGGTATT ACAGGACTGT GTAATTATAG
GACTCTAAT TGACATGGCT TGGCACCAC TTGCAGCTAG TGGGTACAGG GTACAAAAGA TGTTAGAGAA AAGCTCTACA
GATTACGTAC TTTCTGTCT TCGTATGCTC AACACTGTCC TTTTGTCTC CATGAAGAT GAAGGAAGCA AATTTATGTA
TGTCCTTTCT TTGACCTTCT TTAATCTCT GATACTTTTT AGATTGCATG ATTTTACTAG GC

SEQ ID NO:520: (Length of Sequence = 304 Nucleotides)

SEQ ID NO:509: (Length of Sequence = 370 Nucleotides)

TTTTTGAGAC GGAGTTTCAC TCTTGTTGCC CAGGCTGGAG TGCAATGGCA TGATCTCGGC TCACCGCAAC CTCGGCTCC
 CGGGTCAAG CGATTCTCCT GCTCAGCCT CCCAAGTAGC TGGGATTACA GGCAOCCGCC ACCACGCCCTG GCTGATTTTN
 TATTTTGTAGT AGACACGGGT TTTCACCATG TTGGTCAGGC TGGTCTCAAA CTCOCGACCT CAAGTAGTCT GCTGCTCA
 ACCTCCCAA GTGCTGGGAT TACAGGCGTG AGCACTTGGC CTTGGCCGTG ACTGATTTTT TTTCATGTAG AATGTCAAC
 ACGAGAGATC ACAAGTGGAG CACTTTGAAA GACCGTCGGT TGTGTGCACG

SEQ ID NO:510: (Length of Sequence = 446 Nucleotides)

TCTTCTCT TACTTTCTT CCTTCCCTCC TTTCATATGA GAGACTCTAT ATGGAAAAGG AAGCTGAAGT GGCTGCACA
 CGATATAGAA AAGCCATATT ACTTCTTAA GACTGGTAAT CCGGCAATAC CTAATGCAGC ACATGGCTAG AGACTCCACA
 TTGCCCCAAC TTCTCTGCTC ATCATTTGCC ACTGTTCTGT AAATTTCCCA GTCCCCCTAC AGAAAGCACA TGGCACCATT
 TAAAATGGCT GCTCACTCTC TAAGGGAGGT CTCACAGGCT GGTAGTGAGC CTTGTCCCAA TAGTGAAGTT CTCACAAAT
 GGGGAGACTT CTCCAGGAG GAGGGGAGGC CTGGAGATGG GCATGCAGTG GGCAATGTCA GCTGCCCTCC AGGTTCTTGC
 TTGCCCTTTT TCCGCCCTGG GTCAGTATAC AAGCTTTCCG GGGACA

SEQ ID NO:511: (Length of Sequence = 354 Nucleotides)

AATACCAAC TGAACAAACC TGCTCTTTC TGGTTAAAC AAAAAAACA AAACAAACAA AAAAAATCAC
 ACAGTTTAAAT AAAGANGCAA CTCTTCTCTT TTAGGNGCAA GGACTACCAA TCTAATTCCT ATCTATTGAG CCCCCAAAG
 CTCCTTTCAG AGTCTTCTT CTCTTTATCA ACAGAAAAGT CTAGAATGAN TATTCACAGT TTTCTAAGAA AACCAGAAAG
 CCTTTAAGCA GCATTAGCTG GNCATATTTT TGCTCTCTAT AGTTACCATA GATGAGTACA GCTTTACTACT AGGGGGCTGG
 GAGTTCAGAC TCACAGCAGA GACTNCTGGG GTAG

SEQ ID NO:512: (Length of Sequence = 374 Nucleotides)

CATGTATATT ACAAAAAAGT TCCGTACCA AAGTCTCTAT TAGACTTTAT TTGTGTTTTT TTAATTTTTA AAATTTTTTT
 TGTTTTTATT TTTATTTTTT AAATTNCTC TCCTCGTGGT GACTGTCTAT TGATTGTCTC AGTTTCTGGA CCAACAAAC
 AACTAATAA TTTTAAATCT GAAACAGTGA TTGTCCCTTT NGGCTCATGT ATGTACAGGG TGATCAGAAG TGTACCTGT
 TAGCAAAAGT GTCACGATGC TGCACCTCTA CCGAAACTGA TACCCACGAA CTACGGAATC TAAACAGACT ACACCCTGTA
 ACTGCGTATT ACTGTCCACA ATGGGGATCT CCAAGACAA AAGAGGTATG GAAA

SEQ ID NO:513: (Length of Sequence = 463 Nucleotides)

ATCAGCAGAT TTNCTCTGG TGAATGTCTA ATCAGTGTA TTCCATAGG CTATACCTAC CTTTGGGGG CTACTTGCCA
 ATNATGTTG GTCAGTATCC TTGCAACAA CAGAGTGACA GATCTAATAA ATGACTTTGC AGGCCAGTAC TAAGAAAGAC
 ACCAAGGTTT ATGGGCTTGC AAATAAAAAG TCCATAACTT CCTGCCCTA CTTACCAAG TGAAATCGAG TTCTCACAC
 TTCTGCACAC AGCTCTTTCA GGATCTTCCC TTCCCTTCAA GGCTGTCTGA TGTTCAGTTT AATTGATTG TATTTGTATA
 AAGTGCTGAG TGTGAGTCC TCAAAGAAAT TTACTTTTCA TCTAANGCCC CCTTGGGACA AGAAAGTGGC AACCAGGCAA
 ATGATTGATT ACTTATTTGT TTGAGTATCA CTTTGTGATT GTCCAGGGC TGTATTACAC ATA

SEQ ID NO:514: (Length of Sequence = 396 Nucleotides)

CCAACCCAGA AACGTTTCC TGGCTCTCTA CTAACAGTAA AATGTGCTGA GCCCAAATTT TCTGCTCTAA CATGGGTCCC
 ACGACCTAT CAGTCTGCTC TGGGGTGCTG ACCTGCTGGG TCCTGAGCAG GGTCTTTCCC TAAGCATCAC TGTGGGTTTG
 GAGACAGCTG TAATGTGTGC AGCTGTGAGC AGAAAGTACA ATGCCACTGG GCTACATATG TCCATATCAT CCACCACCAT

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SEQ ID NO:503: (Length of Sequence = 446 Nucleotides)

CTACAGTACC CATCTOCCATT TTCAGAGAGC TCCGATGGAA ATTTCTATGA ACTAATTCTC CTGCACATAC TTTGGTACAA
GTGGGCTACT GGAGCCACCT TCCTTCGTTT AATCAAACAG CATTTATTCA GCTTATTTAA TGAACACTAT CCAAGATACT
TGGGGGACAG AAATGAAAAG ATGGGGAGAC CTGTCAAACA TATGGTACTA TGTCTATGCA AAATAACATT GGAATGTAGA
TTCACAGTGG AAGGCAGGGC AGGCATGGAA GAATTCAGAG AATGAGTGTG ACAGCTCCTA CCTGTAAACAG CTCCTCAAGC
TCCTGCTGGA AGCGGTCAGT CAGCAAATCT ACTAGCTGGC TGCGGGCAAA AGTCCGCCCG GCTGGAGGAA AGTGAATTCC
GGGATTTACA GAGCAGGTAG AGGGCATGCG GCGCAGCCCT CAAGCA

SEQ ID NO:504: (Length of Sequence = 248 Nucleotides)

TTGCTCTTCT TTTCTACCAT GGGAACGTCC TTCTCAGGGG ATTTINAGGT CTCGGTGTTC CTGTGTTTCT NAATAGGCAG
TTTCTCGCTG TCGGCTAAGG GCTTATCCAG GNCATATCC AGAGCCCTGT AGGGGTGCTT GGGGTCTTTG TCATCTCTGT
CGCTGGGCGAG AGCATTCTCA GGCATCTCCT CTGTACGAT GTCCACCTGC TGGSCAAGGG CGATGTCTTC GTGCTCTCC
GTGGGCAA

SEQ ID NO:505: (Length of Sequence = 367 Nucleotides)

GCTATGTTGC CCAGGCTGTT CTCAAACCC TTAGCTCAAG CAGTCTCTC ACCGTCTCC CAAAGTNCIG GGATTACAGG
CATGAGCGAC TGTTCTGGG TTTACTAAAT TTAAGAGATT TGTTGTGAAC CATCTGCTGA TCATGGAGCA GCAGAGAAAT
TTATTGACAG ATTTTCTAGG GTCATCACTG ATGACAATCT GNTGCCAGAA CAAGCCTGTA ATGCTGATGA AACATCACTG
TTCGGCAATT ATTGCTCCAG AAAGATACAG ACTACAGCTG ATGCAAAGGC CCGTGTAGGC AGTAAGGATG CCAAGGACAG
AATAACTGTT CTGGAATGTG CTAATAATGC AGCAGGCATT CAATAAG

SEQ ID NO:506: (Length of Sequence = 419 Nucleotides)

ACACCTGGTG ACTTTAGCTA TGCCATACAA AAGCCTGAGG AAACAACCAG GTCCCCAGAT GAAGAAGATT ATGACTATGA
GTCCTATGAG AAGACCACCC GGACCTCAGA TGTGGGTGGC TATTACTATG AGAAGATAGA GAGAACCACA AAATCTCCAA
GTGACAGTGG CTACTCCTAT GAGACCATG GGAAGACTAC CAAGACCCCT GAAGATGGTG ACTATTCTTA TGAAATTATT
GAGAAGACCA CACGACCCCG TGAAGAGGGT GGGTACTCAT ATGACATAAG TGAAAGACC ACCAGCCCC COGAAGTGAG
TGGTTACAGC TATGAAAAGA CTGAGAGGTC TAGAAGGCTT CTGGGATGAC ATCAGCAATG GCTATGGATG GACTCTAAGG
ATGGTTGGCC ACACAACCTT

SEQ ID NO:507: (Length of Sequence = 417 Nucleotides)

GAAAACATTT TTACTTAAAA AATATTCTAT TACTTCAATG TCATGTCTGT TGAACGAGGA ACTCAACATG CTATTATTCC
TTTGGTTCCA AGAAAAACCC AAGTCTAACC AAATGTATGC CACAAGGAAC TGCCAACCTG GTTAAAGCTT GGTATTTTCC
TGGTTATCAC CCTATTTCCT GGTGTAGGAC CTGGGGTTTA ATAGAGACAT TTACATAAAA AAGGTATTTG GTTAAAACAA
GAAATATGCA TGCNCTTCCT TACCACCTTC CTGGGAAAGA ACTGCTTTTT TTNCITTTCT TCTGTGAATC TTGTTCAAGA
CATCCTGTAG TTTAGATATA TGGGCTGCTT CTTTTTACC CTCAAGCTTT TAGGTGACAC TTATAAAGGT GAGCATATCA
TTCTATAAAA TGAAGA

SEQ ID NO:508: (Length of Sequence = 308 Nucleotides)

CTGTTTAGAA AAAAAAGTGC AGCTCACTGT CAGCACTCAT TGAATTTTGC ATAAACATGC TTTTGGAGGC TGAAGCAAAT
CTGACTGATT TTCAATGTGA AAATAAATA TAAANCTGT TTTTAGAGTT ATTTATTAAAC AGAACTAACA TCAGAATTAT
TTGAATCACC AGAATAATCA ATTCTGGAAA AATCAGATTG ATCAGATTAA TCTTTGGCCA ACAACTGTTT AAGAACAATG
TTAACATCTG CATGGCAATG CTACATTINC TAGGATTTGA CATTTTCAGC AATTGAGGAA TTACTATA

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GATTATTAA GTATCCCCGA AAATATAAAC ACAAAACAGT AAAAAACAAA ACCGTAAAAC GTCAGGCCTG GAGCTGCAAT
 AAGACAGAGA CAGGAGCAGC TCACACGTGG CCTAGGTGGG GAGGACGAGG CCATAAATAC TGCAGGAGGG CGGCAAGGGA
 GCCCTAGGGC GAGGGGAAAG CAGGGTGTGG GCAGCGAGAT GGNITCCNGG GTTTAGACAC TGCTGGCTTC GGNCCCGGCC
 GGCACCANGA CTCTCACTTC CAGCTGCGAG CAG

SEQ ID NO:498: (Length of Sequence = 319 Nucleotides)

ATTCCCAAAA ATAGAGTCTG GACCTCTTAC CGCTACAAAT TCCAGGTCTT CAGGTACAGC CTGAGAGTAT GCAGATATAA
 TACACCACAG ATGATTCTCT CCGTTTTTTT TTTTTTTTTT TTTTTTTTTT TTTTGTAGACA GAATCTCATT CTGTACCCCA
 GGNITGGAGTG CAGTGGGCTG ATCTCGGCTC ANTACTTCTC CCGCTCCNG GNTTCAAGCA ATTCTCTGCT CTNAGCCTCC
 CGAGTAGCTG GGNCTACAGG NGCACACCAC CATGCCATC CAATTTTGGG ATTTTAAGTA TAGTTGGGGT TTCACCATT

SEQ ID NO:499: (Length of Sequence = 408 Nucleotides)

GAGAAATACC TAATGTGAAT GACGAGTTGA TGGGTGCAGC ACACCAACAT GGCACATGTA TACCTATGTA ACAAACCTGC
 ACATGTGTAC ATGTACTCTA GAACTTAAAG TATAATAATA AAAAAAGAGA ACCTTTAAAA AAAAATAGAC TGCCAGATAG
 ACTAATAAAT AAAAAAGAGA GGTGAAATA ATCATAAATG ACTAAGGGGA TGTTACCCCA CAGAACTACA AAAAACAAAC
 AAAAAACCT CAGAGACTAC TAAACACTC CTATGCACAC AAAGTAGAAA ACCTAGAAGA AATGGGTAAA TTTCTGGAAA
 CATACANCCA CCGAAGATTG AACCAGGGAG AGATTAAAGC CCTGAACAGA CTAATAATGG NGTTTCAAAA ATTGAATCAG
 TAATAAAA

SEQ ID NO:500: (Length of Sequence = 474 Nucleotides)

TTTTATTTTT TTCACGTGTA CTGTTTTTNA TCITGTGATT ATAAAAATGA AAATGCCAAA ATGAGGGTTA GCTTAATTTA
 AAGTATAAGC GTAGTTAGCA GCTTTTNTA ATCACTCCTG TCCATTMAA AAATAATCCT CATAGGAGTA TAAACAGAGG
 AAGSAGAAAT GGAGGATGGG CTTAAGAGAA AGAGTATTTT ACAAATGTCT GCATAGCAAA TTCAATTCAT CTACCTAGTA
 GCTCCTCCG TGTTAACCTA CAGGTGTTCT CCCCTCCAAA AAAAAGCATC TTTTAGGAAG AAACCACCTT AACACTACCT
 TTAGANGATT GAACTTCCAG GGATAGGTTG TTTGAGAGAA TCACCAAAAG CCATTTTTTA ATGAATTTTT AAATTACGGC
 TTTCTCATTC CTTATAATAG TGTAGCAGCC ACCTTCCCTC TACTATGGAA CTTTAAACCA ATAATCCAAG TCCT

SEQ ID NO:501: (Length of Sequence = 378 Nucleotides)

GTGGTGGGG GCGCCTGACC TCGTGATCCG CCGCCTCAG CCTCCCAAAG TGTGGGATT ACAGGGGTGA GCACCGCACC
 CGGCCCTGT GTACATTTTT ATAAGAGAAT TTTTTFAGCT AGGAGTTCAG AATTTTTTAAA GTACCATTGT AATGATCTTA
 ATTTTNCITT CATGACAACA CATTCACAAA TGAATCATGC TTATGTACTA AGAGGGAAAA TGTATTTAAG NTAAGGGTGA
 GAGACTTAAG TTATAGGTGA CCTTAGAGAC CTAAGGTGAG AGACTTGACA CATGGAAGGA GTAACATTAG GGTCTACCTC
 TACCTCAATT TAGTTAGCGA TTTACTACAA TTTAGAGCT AACAAAAGTA AAAATAAA

SEQ ID NO:502: (Length of Sequence = 448 Nucleotides)

TTTGGAGAT GGAGTCTTGC TCTGTGCCC AGGCTGGAGT TCAATGGCAC AAATCGGCT CACTGCAACC TCGCCTCCC
 AGGTTCAGC AATTTTCTG CCTCAGCCTC CCGAGTAGCT GGAATTACAG GCACAGCCA CCATGCCAG CTAATTTTTG
 TATTTAGTA GAGACGGGG TTTCCCATG TTGGCCAGG TGGTCTCAA CTCTGAACT CAGGTGATCC ACTCCCTCG
 CCTCCCAAAG GGTGGGATT GCAGGCGTGA GCACCACGNC CAGCCATGAT CCTTAACTT GTTTTAAGAG GTATAATAAC
 TGGAAATCAT GATGCTCTT AAGGAATACC AATTGGATGT ATTATTGATG TATTTAATTC CATCCATATG NAGTAGAAAC
 AGTTTTCATT AGCAGAAGGC AATTATATTA TAGCTACACA ATATAAAG

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CCTGTAAGTTG TCGTCCCTCA TTCATTAAAT TATGATACTT GCCTGGCATC TTGCAGGTTT CTGATGCTGT TACCCAGTGA
TAGACCAAGT GCAGACAGAA TTTCAATTCT GCTTTATTAA GGCACAGTCT TGAGAAACCC ATTGGCTTCA CACACAATTA
ATTAATTTNT GGCAACAAGC TACTATATIG GCTTGATGT CACTTTCACC TCTCTGGGCA TTAGTTTNT CTAAATATTTA
TAAAGAAGG ACATGACTTT CTAAGGTTC TTGCAGTAAT TATGCAGTTC TATTCTAATA GATGCTTAAG CATAAAACCC
ATTTTAATAC TGTCCAAGG ATCCAGG

SEQ ID NO:492: (Length of Sequence = 320 Nucleotides)

GAAATTGGNT CCAAAGTTTG GACATGTCAT TTCATTAAAT CGTCCCTTAA GTTTATTTTA ATCTGTATTT TCCTCCTCCC
TTTGTGTTT TTTGTAATCT CTTTTGCTG TTGTTTTGG TTAAGAAAC CATGTTTTTT TCGTCTGTG AGTGGCTCCT
GTTCAGAAIT TTAATGATTT CATCTGCTGG TATCATTTAG CATGTGCTC TGTCGCCCGT AGTACTTTAA ACTAGACGTT
AGATCTAGAG ATGTGATCTA CTTGGGTAGG ACTTTGTCAA GAATACTTGT AAGTAGGTAT TTAGGTACCA GGGGNCACAT

SEQ ID NO:493: (Length of Sequence = 339 Nucleotides)

TGCCAAGTTT GCTGGACAT TATCAGATGG CTAGGGGAG ACGATGGACA ATCGGCATCA GTCAGAGCGG GAGTACATCA
GGTACCATGC AGCCACAAGT GGTGAACACC TTGTAGCCGG CATCCATGGC CTGGCTCATG GTATCAATGG TGGACTGACC
AGTGTATATA CTTCGACAGT GGAAGGTGTG AAAACAGAAG GGGGTGTGAG CGGTTTCATA TCTGGCCTTG GAAAGGGCT
TGTGGCACT GTAACCAAGC CANTGGCAGG CGCCCTGGAT TTTGCATCAG AAACAGNCCA GCGGTGAGA GACACAGNCA
CACTTCAGCG GCCCCAGGN

SEQ ID NO:494: (Length of Sequence = 366 Nucleotides)

GTAGGCCTTT GGAAAGTAAT TAGGATTAGA TAAATCATC AGGGTGGGGC CACCATAATG GGGCTGGTGG CTTTATAAGA
GGAAGAGAGA CTTGAGCTGA CACGCATGTA CTTCCTCTT TGTATGTGG TGCCCTCAGC CATGTTAGGG CACAGCAAGA
AGGCCCTCAC CAGATATGG GGTGGTCTTA GACCTCCAC CCTCCAGAAC TGTAAGAAAT AGATTTTTTT ATATATTACC
CAGTCTATGA TATTCIGTTA CGGNAACAGN AAACAGACTA AGACAAGCTT CTTAAACAAA TTGANAATAG AGTTTAAAGA
TNCAGACTTT CATTCCTTT AACAGGGGCC AAGAATATCT ATTCA

SEQ ID NO:495: (Length of Sequence = 384 Nucleotides)

CGAGGAAGGC AAGAAGCGCA GGGGGTGGCC CGCTGGCGT CGGTGGCCTC CGCTCCTGCT CGCAGCCCTT GTGGTCAGAG
CTGGATACAA GATTCAAGAC CCTTCNTTG CTGTGATCCC GCTCCAGGTT GGAGCCACAG ACACCCACCG CCACCCCGGC
TGGGTCTGCA TCCTTTCTTG TGCTTTTCCC TCCAGATGC GGCCTCAGAC CTAGAAGCTC AACCCCTTA TGAGGGCCAC
GTCTGGGGT AGCTCCTGAC CINCAGCCTT ATGTCCAAAT TTCACACCCA TGGTTTTTCA TTGACCCCG CCGCTTCTCG
CTCATAATGA CAACNAGCTT CCTTTGAGAG GGATCAGAGN CCAATTGCAC AAGGAGGAGC CGCT

SEQ ID NO:496: (Length of Sequence = 342 Nucleotides)

TACCTTAGTA AATGCAATTT TGAACAGGC CCCATCTTC AACTGGTATA GCATCTTCCA CACCTGTAG CCTTCAACA
TCACCTGTTA AAATACTGCC CATTCCATGT CATGTATATC TGCCCATTTA TGGGAGCAGT GAGTGAACC CTGACAGTGA
CGGACTTTAA GCTGTACTTC AAAAATGTG AGAGGGACCC GCATTTTATC CTTGATGTTT CCTTGGAGT GATCAGCAGA
GTGGAGAAGA TTGTGNCAC AGAGCCATGG AGACAATTCC TGTGGTATAG AGATAGTGTG CAAGGATATG AGGAAGTTGC
GGCTTGCTTA TAAACAGGA AG

SEQ ID NO:497: (Length of Sequence = 273 Nucleotides)

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SEQ ID NO:485: (Length of Sequence = 376 Nucleotides)

GGTCCGACGC TGTGTCAAGC TCTGCACCGG CCATGAGTAT GCAGCCAAGA TCATCAACAC CAAGAAGCTG TCAGCCAGAG
 ATCACCAGAA GCTGGAGAGA GAGGCTCGGN TCTGCCGCTT TCTGAAGCAT TCCAACATCG TCGGTCTCCA CGACAGCATC
 TCCGAGGAGG GCTTCCACTA CCTGGTCTTC GATCTGGTCA CTGGTGGGGA GCTCTTTGAA GACATTGTGG CGAGAGAGTA
 CTACAGCGAG GCTGATGCCA GTCACGTAT CCAGCAGATC CTGGGAGGCC GTTCTCCATT GTAACCAAAT GGGGGTCTGTC
 CACAGAGACC TCAAGCCGGA GAACCTGCTT CTNGCCAGCA AAGTNCAAAG GGGCTT

SEQ ID NO:486: (Length of Sequence = 396 Nucleotides)

TTGATATTTG TGTCTAATTC CAGCTACTTT GAAAGCTAAG GCAAGGGGAT TACTGTATTA ATAAATTCTC ATGCTGTAA
 TAAAGACATA ACCAAGACTG GATAATTCAT AATGAAAAG GTTAATGGCC TCACAGTTTC ACATGGCTGG GGAGGTCTCA
 CAATTATGG AGCAAACAAG AGACTTTGTT CAGGGGAATC TCCACTTATA AAACCATCAG ATCACGTGAG ACTTTTTTGC
 TATCATGAGA ACAGCATGGG AAAATCCAC CCCCATGATT CAATTACCTC CCACAGGGTC CCTCCCAGGG ACATGTGGAG
 ATTATTACAA TTCAAGATGA GATTTGGTTG GGGACAGAGA GGCCAAACCA TATCAATTAC TTAAGGCTAG GGGTTT

SEQ ID NO:487: (Length of Sequence = 375 Nucleotides)

TGATTAAAT AATAGAGTTT AGTAATATGG ATGAATATAA GATAAATATT TAAAAAGCAG TGTATTTT ATAGCCCAGC
 AAGATAAAGT TCAATATGT ATTTTATAA AAGATGGATT TACAATAACA TCAAAATTA AAATGCACCT TGAAATAATA
 AAGACATGTA AACCTTTTA TGANGACAGA TTTTAAAG CATTTTAAA AATNCTTTT CATTGACAAA TAATTATCCN
 TATTINTGGG GTACACAGTA ATGTTTCAAT ACATATAATA AATAGTGATC AGATCAGAAT AATCAGCTTA TCCATCATTT
 CAAACACTTA TCATTTCTNT GTGTTAGGGG CCATTCAACA TCTGCTTCT GGCTA

SEQ ID NO:488: (Length of Sequence = 323 Nucleotides)

CACTGCATTA ATGATTGGNT TAACAGTATA TAAACAAGGG CCATGGTTTT TTTTACTAAA GTAGGTCTGA AAGATCAATA
 TAAATACTAA TGGGGGCGAG GAGGAGTGT TTATACCCCA AACTCCAATA TTCCAGCTCT GTGTCCGTGC CTATTATTAT
 AATTGTGAAA AATCTTAACG ACGCAGTGAT TCGAGTTTTC GTAACCTCAA TGATGTGTTA GAGGACAATG CATCTTGGTT
 TGAAGAATTT GCTGTATCCG AAGGCCGGAA AAGTACTCGA CCACGATGAT TAAATACATA AAAGGATGGG TGATTCCTTA
 CCG

SEQ ID NO:489: (Length of Sequence = 326 Nucleotides)

TTACCTTTTA CTCTGATCAT AATCTCCAC CTGTCTAAGA GGTTATTTAT TCCTTATTTA GAGGGCCTCT ATTGCCATGT
 GCGTGGAATT ATTATATGCT CATCACTTA TGAAGAATAA AATTGTCTT TCTGCTTTA AAGTTACATT CGTCTTCCG
 CTCAAATCCT GATCTGGTCC ATTAAAGAGT GTTCGCAGAC AAAGTTTCG AAAGATTAGA GAAGAATCCC CCCAAGATT
 GCCCCAACAC TGAACACAG ACAAACACTA TTTTATTTAA ATAAGGNGAC AGCTTTCTAA AAGTATACAT TCTCTAATA
 AAAATA

SEQ ID NO:490: (Length of Sequence = 186 Nucleotides)

CTCAGATCCA TCAAGATGTG AAACGCGAA GTTGGTGCA GAGAAGGTAC ATGGGTTTCC TTCTTTTCTC ATCTGTATTC
 CCTTTTCTGC AATTATTTTC TTGCCACAT ACTAGCCAGC AAACCAGGCA CCTTTGCCAG AGCCATTAAAG CTACAAAAAT
 ACTTAATATT TTAATTGAA CTCTGC

SEQ ID NO:491: (Length of Sequence = 347 Nucleotides)

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GCAGACCACC CTACATNCTC CTGIGTGTGG GGACACTGTC AGGNTGTCCT CCTGCAITTA GNCTCTGCTG AGTTTCTTAC
CATGTGNC CA GGAATGNGTC CATAGTCGGG GCATNAAGGA CTTAGGATGG GCCCAGTC

SEQ ID NO:479: (Length of Sequence = 360 Nucleotides)

GCATCGTATC TNCITTAAGA AAAACACITC TTCAAAATCC TACACTATGA AAAACTGTCT TCAGGAATTG TTTATTGGT
CCGTGATCT AGTGGAGGCTG AGTCTTAAA TCTTTCACCC CCAAGTTAAA AATTGGAGCA ACAAACAAA ACTCCAGCAA
GGCATAAATA AGATATTAAA GTGCATATAT ACAATACCAG AAAAGTTTAG ATTGGGAACA GCAAAAATTT CTAGTGCAAA
AACTGCTTTT GCCAGCAAAG CTCCCTCTCT GGAATCAAAG GGCTACAGTA AAAGTTAAAA TTGGAACAGG NTTAAGCAAT
GTCTGTCTTT AGTCACAAGT NAATATATGT GCATGCACCC

SEQ ID NO:480: (Length of Sequence = 322 Nucleotides)

GAAATTAAGT CTAAGCAAAA AGAAAAATAA AATGACGAGT TACTGGGTGC AGCACACCAA CATGGCACAT GTATACATAT
GTAACAAACC TGCCCATCAT GCACATGTAC CCTAAAACIT AAAGTATAAT AAAAAAAAAA AAANTGAAAA GCTTCAGCCA
GAGGTACAA TGCTCACAAC TCATTGACCA AAACATCTCT ATACCCGINT TAGAGCANGG NGCAGGAAAG CAAAACCAT
CTTCTTACTG TTCCTGGNA TACAAGTTC ATGAGGGGAT GCAATTININ TCTTGNCAC TCTGTGTCC TCAGGGTATA
GG

SEQ ID NO:481: (Length of Sequence = 369 Nucleotides)

CCTGGGCAAA GCATTGATCT GGTAGCCTTG CTCCAGAAGC CTGTCTCTCA CAGTCAAGCC TCAGAAGCCA ACTCCTTTGA
AACTTCCCAA CAGCAGGGCT TTGGCCAAGC CCTTGINTTC ACAAATTCG AACACAACAA TCAGATGGCA CCAGGGACTG
GCAGCTCCAC TGCCGTCAAC TCTGTCTCTC CTCAGAGCCT GTCATCCGTC CTTGGCTCAG GATTTGGAGA GCTTCACCA
CCAAAATGG CAAACATCAC CAGCTCCAG ATTTTGGACC AGTTGAAAGC TCCGAGTTTG GNCAGTTT ANCAACANOC
CAAGTACACA GCAGAATAGG TACAAGTCAA CCTTCAACT ACTACTCT

SEQ ID NO:482: (Length of Sequence = 255 Nucleotides)

GAGAGAATCT CGCTCTGTG CCCAGGCTGG AGTGCACTGG CGCAATCCCG GCTCACTGCA ACCTCCGCTT CCGGGTTCA
AGTGATTCIN CTGCTCGGC CTCCOCAGTA GTTGGGATTA CGGGTGACA CCACCGCACC CGGCTGATTT TTTGTATTTT
TGGTAGAGAT GGAGTTTCAC CATGCTGGG CTGGTCTGA ACTCTGATC TCAGGTGATC TGCCCGCTC AGGCTACCAG
AGTNCCTGGG TTACA

SEQ ID NO:483: (Length of Sequence = 353 Nucleotides)

CTGGATAATC AGGGCCATGT GCTTTAACAG GATGTAAAGG GGAAGCTCAT GATTAAACAT GGGAAATATG CAGCAAATG
CAAGACCTGA GCTTAACCGC ATAAITAGAA CATAATTTIN CACTTCTTCC AGAGCATCAG CCAAGCAAAG GACTGAGAAA
TCTGCAACCC AATGTCTTA AAAAGAACT TAGGCTTCAC ATTTGTGACA TAATTTCTTT TAAAATGAAT ATAAATTTT
ATTTTINATA TTTGTAGAGC ATAGGATGAT TGAAATCCAG TGTGTGTTT ATCTGACCTC CATATCTAAT ATGGCTAGTG
CCGTACTAC TCTACAGAAC GCGCAATAAG TCA

SEQ ID NO:484: (Length of Sequence = 371 Nucleotides)

GACCCAGAAA ATGGAGCTAG CTACATTTCT CACACTTACT GTCATAATTA CATGTTTATA TTCTATTAGT TGTAATTAAT
TTTACCTAT CCTCTCATTA GAATGTTATA CCTATAGAGC AGATACCATT CCAGTTTAA TTTTGTGCC GACTCCTAG
TAAGTACGTG ACCTATTACA GGAACCTAA AACAAACAAA AAGTCTGCTG AGTCTGGGAT GTTTTAAGGA TCGAAGGAAC
ATGTTGGTCC AATTTGCCTT CACAGAGGGT TACCTCTGCT TTTCTACGA ATGTGGAAT GCTCCCATGT GGATTTTNA
GGAATTCAG TCTACCTCA GGGGAAGGNC CACATGTAAT GCCAGAGGTC T

SEQ ID NO:473: (Length of Sequence = 345 Nucleotides)

TTTATTGTAG TTCAAATACA TAAACTGAAC ATTCAAACAT CTTAAAATTA AACTTTAGCA ACAAGTTTA ACATTCAAAC
AGGAGTATAG TTTACAAGAA ACACCCAGAA AGGTAAATTG TTGTCTAATC CAGAATATTG ATAAAGATCA CTTAATGGTG
AATAAAATAT GTTTAACCAG TGGTTCTATT CTGGCCAACA TGTTAGTTAT GACCGTGGTT CCATACCTGA GAAGAAATTA
CTACATAAAT CTCTCTTAG GCTAAACAAC ANGACTCGGT CTATAATTCA GAGGGENTAA TCAAAGCAG TAAGGGTACC
AAAATAAAAC TAATCTGATC TTTAG

SEQ ID NO:474: (Length of Sequence = 433 Nucleotides)

CAGAATTAGA GCTGTACCCC AAGGGGGAAT TCTGTCTAG GAGACAGTGA GINCTAAGTA CACTCTGGAC AAGCACCAGA
CACAGAAGCT GCCTCAGTTT GTGCTCCCC TGCAAAGCAG AGCCTGAGAC AAGGATTGG GTACAAGGAG TTTCACTCAA
TATTATATTT CCAAGATGCA CCCATGCTTT ATATGGCTAT AGTGCAATCA TTTTACTGCT TTATACTTTC CATTAGGTGA
CTATATTAGT ATATATTTAT AATTCCTAGG TCTTTTGTG CTCTTATTTG TTAATAATTA TAAACTCCAA GCCCATTGTG
GTAGATTGCT ATTTCTCAGA GATATTTTCT GCTCCTTCT GGGGGACAAT AATACTNITC TCCCATCAAT GGCAGATGTN
GGGCTTGINA CATTTTCTGG TCAATGGAAT GAG

SEQ ID NO:475: (Length of Sequence = 427 Nucleotides)

GATATGGTTT GTGTGCCCAC CCAAATCTCA TCTAGAACTG TAGTTTCCAT AATCCCCACG TCGTGGANGG GACCTGGTGG
GAGGTAATCG AACCATGGGG GTGGTTACCT CCATGCTGTC CTTATGATGG TGAGTTCTCA TGAGATCTGA TGGTTTTATA
AGGGACTTTT CCCCCCTTGG CTCGCACTT TTCCATGCTG CCACCACGIG AAGAAGGATG TGTITGCTTC TCCTTCCACC
ATGATTTAAG TTTTCNAGG CCTCTCCAGC CATGCTGAAC TGTGAGTCAA TTAAACCTCT TTCTTTTAAA AATTACCCAG
TCCCAGGNAT GTCTTCATTA GCAACCTCAG AGCAGATTAG NCACAATTCC ACAACTTGGG GAATNGGTGT TCAAGTTTCA
CTCTGGCCTT NAACAACCCA AAATTTA

SEQ ID NO:476: (Length of Sequence = 351 Nucleotides)

CGCCGCTAGG GCGGCGGGG GTCCGGACGC CGGGCTAGGG GCGCGTCAATG TGGCCGCTCA CGGTCCCGCC GNCGCTGCTG
CTGCTGCTGT GCTCAGGCTT GGCCGGACAG ACTCTCTTCC AGAACCAGAG AGAGGGCTGG CAGCTGTACA CCTCAGCCCA
GGCCCTTAC GGGAAATGCA TCTNCAGGC CGTATCCCA GCGCAGAGTA CCTGCTCTCG AGATGGCAGG AGTCGGGAGC
TGCGGCAACT NATGGAGAAG GTNCAGAAC TCTCCAGTC CATGGAGGTC CTTNAGTINC GGACGTATCG CGACCTCCAG
TATGTACGCG GCATGGAGAC CCTCATTCGG A

SEQ ID NO:477: (Length of Sequence = 333 Nucleotides)

GGTCTCACTC CGTCATCCAA GCTGGAGTGC AGTGGTGCAA TCCTCAATC ACTGCAACCT CCGTCCCGG TTTGAGTGAT
TCTCATGCTT CAGCCTCCCG AGTAGCTGGG ATTACAGGCA TGAGCCACTG TGCCCGCTG GGATATAGAA TCTAAGAGTT
GATTGTGGAA AACACGTGAA TCTATTGCGC GCATTNTTCA TTTAGCAAGA TGGCAGCAGT CCAGCTGTTC TTTGAGCTG
GAGATGAAT TTTAAAAATC CCCTTCACAC TTAATGTACT GACCGAGACA GAAGTACCTG AAAACAGCT NTGCATGGCA
GGCCCGGCAA TAG

SEQ ID NO:478: (Length of Sequence = 458 Nucleotides)

ACATGTTAAA ATAAGGTAAT ATGAAATAAT CTAAAAAAA AAAAAGTGCA GAACCAAGAC CTCTGTGATA ATCTATTITA
AAAAAATAGC TACAATTTTA GTTAGAATGT TTCCCTTATG AGAAAGCAAT TTCTGCATAA CTTTTAATGT ACTGACCTTT
TCCAAGCTTG CTGAGCTGGC CTTTGTCTCA ACTCACTTGG GACACCCTTC CCTGTGCTTC ACCAGGGCCC ACCCCAAGTC
CCAGTTTCTC TAGGGGGTCT CTCGGGACCC CTTGAATCCC TTTNCTGATT TGTGCTGCCT TTAGCAGNCG GAATGGGCTG

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GACGACATTT ATTCTTTTC CAAATGTTAC AGTAAAACCA GGTGGAAGAG AATGGTTTTA GCAGTTAGAA AAAAAAAAAA
 AGTACAAATC TGGGGTTTGG CCATTAAAAG TTATTTACAA CAGTGGGAGA AAAAAAGNCA AGAAGTTGTT TCACATTACA
 GACCTCCCCC CACCCCAAAG CCTAATACTT GCTTACCAAG TCAAAAAGA GACACAGTTG ATTCACAGGC TGGAGGTTTG
 AACTTGAGTA AGACATTTAT AAAAACCTAG ACGGGGCAGT GTCTTNCCTA GCCCAGGTGC CACTTAGGCC AGCACAAGGG

SEQ ID NO:466: (Length of Sequence = 352 Nucleotides)

CATGTATTT CCCTTCTTCA AATTAATTAC CTACCAAAAA ATGGAAGAAG ATTTTACATG CACTTTAAAA TAGTAAAATG
 GAAAGTGAAT TTTTAAATA TATGCATTAA AAGTTTACTT TAATTTCCAG TGGGACTTCC TTTATGAAAT TTTCCATAAC
 CTCTTCTGG AGTATTACAA GATCTCCAAC ATCTCATAAA CTAAATGTGA TATTAGTGGG ACCATAAGCA AATGTATATT
 TTTAGTGGAA ATAGATTATG AATGAAAGCC AAGCACCTTA CTTTAAAGCC AAAATATGAG ATTTTCCATT AAAACCAATT
 GTTCCATAAT AGGGAGGGGG GTTTTTTAAT TT

SEQ ID NO:467: (Length of Sequence = 352 Nucleotides)

TGAAAGGCAA AAAATAAATA AATAAAATA AATACCATTT GCAGAGACAG AGAAACCATC AGAAGAAGAC AAGCAAGGTT
 GTTGAATTA CTACGCCTAG AATTTAGAAT AACTACTATG ATTAAAACGA AAAAGGCTTT AATGGATAAA ATAGATAGCT
 CCTAATAACA GATAGTAATA ACATATGGGT AATGTGAGCA GAGAGATGGA AATCTTAGAN CAACAACAGC AACACGNCA
 AAGCGTTAGG GATCAAAAAC ACTGTAAACA AAATTAAGAN TCCCTTTTAT GGGCTTNTTA ATAGNCTINGG ATACAGGTAA
 GTAAAGAATC CCTGTGCTTT AAGGAGCCAT CA

SEQ ID NO:468: (Length of Sequence = 336 Nucleotides)

TGACATCTGC ATCTTACATT ATTAAATGCA AAGGAATATC AAAGACTCCT CTGCTAGAAC CATTTTTATT CATAAAGTCA
 CATTATCATT GTAGAAGTCT TGIAAAAATG CTACCTGAAA TGAATTATGT CCGTCTTCCC ATCTGGCTTA CAAAATTCIT
 GAGGAAGCAT CTGCCTGTA GCTCTTTATC TTTCTATTTT CTAATACAGG GACAATGTAT ATGGAAAGAT AAATGTGTGT
 AGGTGTATAA ATTCTCAATA AATATTTGCT GAATTAGATT GTACAGTTGT TATCTTTTAA GNTAACTCA TCCTGAGGTA
 CATTTTATTA TTGGGC

SEQ ID NO:469: (Length of Sequence = 156 Nucleotides)

GACCGATGTA GAATCTGTC TGGAGACGTT CTCCCTTCA ATTCAATGGG AAGGNTCTTT TCTGGCATGA NCTCTCGAT
 GTCTAATGAG CTCTGAGCAC CATCCATAAG CTTTNNACA TTCTTTANAT ATAAAAGGTT TCTCTCCACT GTGAAT

SEQ ID NO:470: (Length of Sequence = 350 Nucleotides)

TTCTCATGTC TGAATTTAC ACGCACAAGT CTGAAATGTG AAGGTTCTT AATGTTGGTT TTATGGTTTG TGTAAGATTT
 TTGGGAAATG AAGGGCTCTT CATTAGGATA AAATGGTCTT AACTTCCCAG AGAAGAATTT CCTGACAACG TGGCTGAAGT
 TAGATACAAA TGTTAATATA GAAGANTGCT TTTATTGAA TTTCTAGCAA ATGGTTTCA ACTACTTTAA ATATGACCNA
 CTTGAAAGTA TTATCCINT TTTAAACTA CTTTINATGT ATAGATCTAA GGTCTGCTTG AAGCTAGTAG GTTAAAGTGT
 TTGAGAAATA AAGGCAAGAT TTTTNCNTTA

SEQ ID NO:471: (Length of Sequence = 270 Nucleotides)

GGAGCAGGGC TGGGAGTCAG TGGGAGATTG GGAGTCCAAG TCTGGACATG TTACATATGC TATGTCTATT ACAGATCTGA
 GTATAAATGT GAAGTGGAGT TTTACCACGT GATTCTGAAG TTCAGAGAAG AGGTACAGGT TAGAGATAAA GATTINGGAG
 TCACAAATAT AAAGATGTAT GACTTINATGA GATTACCAAG GAAGTGGAGA TTAATAGCAA AAAGAAAAGT TTCAAGCTTC
 AAGCCCCGAA GCATTCTAAT GTTTACAGCT

SEQ ID NO:459: (Length of Sequence = 339 Nucleotides)

ATTTTCCTAG AACTGAAATC ATCTACGGTT CTCAGAGCTA AACTTCCAAA GCTACAGTCA GCAATTTTTTC ATCAGAGCCC
AAGGGAGAGG GGCCAGGGTA AAAGAGACGA GACTGTAGAG AGGCATAGAG AGACCAAGTAG GAAGAGGGTG GGAGAGGGCA
CTTATTTCTC TCTGTCTCT CAGTGGGTTA CAAATCAGAT CTGGTGACAA CACTGAGGGG GCCAGGTCAG GGTATGTINGA
TGAGAAATGA CACTGGAAGG AACATCAAAG CCGCAGCTAC AAAAAGAAAG TCATCAAGCC CCAAATAGAA GGGGGAGCCT
CCCAGTGCAC CTCAGAAAT

SEQ ID NO:460: (Length of Sequence = 380 Nucleotides)

GAGCTTTTGC ACTGCAAAAG GAACAGTCAG CAGAATAAAC AGACAGTTAG AAGTACTTCC CTATGTAGAG ACACACTCAA
GTGAAAGGGA ACCAGGCTCT ACCACTTGAA ATAAGGAGTA TCAAGGAACT TGTGGACAGC TTTTAAAACT ACCACTGGCA
ACTAGGTCTT GAGGTGGATA AATGAAGAAA TTTGGGGAAT CTCACACTGG AGATGTTTGA TGTAGGTAAA TGANCTGAGA
TTCATTAGGT GTGAAATAAT GAAGTGTATA TATAGTTCTG CATATACATG CCTGGGGAAG GTATAATATT CAGAGGCATA
CTATCACTCA ATTGTATCT GCTGTGGGCC TCAGACAGTA CAGGGGCAGT GTTTCATTG

SEQ ID NO:461: (Length of Sequence = 317 Nucleotides)

GTCATTAAGA AGCCTTTATT GGGTTATATT CAATTTGACC TCCCACCAA TTAAGCGGGA AAAAACAAAA AAATAAGAAA
TCCCAGTAAA AGAGCCCCTC AAGATTTCAT AAACACAAA CTAAAGCTGC TAGTTAATAA GGAAATGGCA GAATTTTCAG
AGCTGTATAA TACAAAAATT CCGTAATTT AAGCAGATGT TTTCCTCACT GATGACAAAT CTCCAACAC AATGTGAAGT
TATGCTACTT GGGATATTTG TAGGCAAAAC CATTTTTTTT TTGTACAAAA ACAAAAGCAA GGGACCNTGG AAAAAAA

SEQ ID NO:462: (Length of Sequence = 261 Nucleotides)

AAAAAGGCCA TAAATCCTTN CCGTGTGGA GCTTACCTTC TAATAAGGAG AGACAGAGGG TNAGAAACAA ACAAAACAAA
ATATGTNAGT TAACACAGAG TGTGGAGGG TGTCAGGTGC TATGGGAGAA ACGTGGAGCA TGTCAAGGNG AGAGCAGGCA
AGAGGGCATT CTGGAAAGGC CTAGGANGAT GGTGACATTT TACCTTCATA TCCACCAACC CCCAGCACAA AGCATTTTCC
AGAGGNAGNC AGAGGAGGGC A

SEQ ID NO:463: (Length of Sequence = 387 Nucleotides)

ATACAAGTAC ATCCAGGAGC TATGGAGAAA GAAGCAGTCT GATGTCATGC GCTTCTTCT GAGGGTCCGC TGCTGGCAGT
ACCGCCAGCT CTCTGCTCTC CACAGGGCTC CCGCCCCAC CCGGCTGAT AAAGCGCGCC GACTGGGCTA CAAGGCCAAG
CAAGGTACG TTATATATAG GATTGCTGTT CGCGTGGTG GCGAAAAAG CCCAGTTCCT AAGGGTGCAA CTTACGGCAA
GCCGTCCAT CATGGTGTGA ACCAGCTAAA GTTGTCTCGA AGCCTTCAGT CCGTTGCAGA GGAGCGAGCT GGACGCACT
GTGGGGCTCT TGAGAGTCCT GAATCTTAC TNGGGTTTGG TGAAGATTTC ACATACAAAT TTTTGA

SEQ ID NO:464: (Length of Sequence = 397 Nucleotides)

GTTAGCGTG GGCTGTGGC GTCGCTGAA GTACACAGT ATTGTGGCTC CATTGGCTGA GGATGCTTCT CCAGCGAAGG
AGGCAGGGAG CCGGGGAAGT GGGGTGGGT CGCGACACCG ACAGCAGCTG CCAGACCAGC CATGCTGCGC TCAGTCCCT
CAGGCTGTCA CTCCTAATCA TCATGTCAT ATCTCTGGGG CGTGTGCTC ACCATCAACG ACGTGTCCCC CAAGCTGCAG
AGGACGCAA TCCAGCTCTC CAAGAGGCTC TGTGGCCCT CTCCACATGG GCTTINAGGT CAAGGGTGG GGGCACGTTC
GGACGNCCT TCCTGNCCT TTINGAAGAAG ATCCTCCAN GTNCCGGCT TCAGCTTCT CCGGGCTCT TTTGGCA

SEQ ID NO:465: (Length of Sequence = 320 Nucleotides)

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SEQ ID NO:453: (Length of Sequence = 382 Nucleotides)

ATGAGGGAAA AGATGGTGCC ATGAAGATA TTATCACAGT GCTGAAGACT GTNCCCTTTA CTGCTCGCAC CGCCAAGCGT
 GGCTCTCGGT TTINCTGCGA ACCTGTTCTC ACTGAGGAAT ACCATTACTA AACTATTACT CTTTCTCACC TGATGCTCTT
 AAAAGATCTT AGAAACCAAC CATAAGACG AGCOGATGCG GTGAGGAGAA GCGTCAGGCG GCGCTTTGAT GATCAGAACT
 TGGTTCCTGT TAATGGTGCC GAAATAACAA TGTGAACCTG AGACTGGCCT GCAATGAATA CAGGGGTGTG CGTGTTCAGG
 AGGTTTTCTG TTGCGGTCAC CCATGATGGC GGGCCTNCCC ATTTGGGCCA ACTTTTCCTG GG

SEQ ID NO:454: (Length of Sequence = 391 Nucleotides)

CGTCGCCTG GTGIGACTGG CTGGAGAAAT AAGTTAGGGA GAATCTAGAT ATGGTTGAAT TGTGATTGCT GCTCAAAATT
 TGTTTCTTTG TGACAACAAC AACACAACA ACAACAACA CAACAACAAC AACAGGTGAA ATTATCTTGA AATACAAAAG
 AACGTCCTGT GGTCTGAGA GTGAAAAAAG GAATCCTTAA CAGCTTCAGC TTGCACCAAG AGGATTTTTT TTTATCAGCT
 TCCCTTCATA AGAGAGGATG GAGGATTTTG GAAGAGACAG AACCTGGGAG AAATTTTCAGT GAGCTGCCAC TTAAGTGGTT
 AACCTACTTC CACAGAAGGA ACCTATTATT GTTNTATTG GGAATTCAGT AAATGTGGGC CATGTAAAGG G

SEQ ID NO:455: (Length of Sequence = 282 Nucleotides)

TTGAGTACTC ATTGAGGAC TGCAATCATA GATTTAAGT GTAATCAGTC AACTCAGTGG AATTACTTTC TCATTTAATC
 TTAAATTGCT TCAGGACTGT TTCAGCCTAA GCCAGTAGCT GGGTTTAAAC AAATTTGAAG ATTTTINCTAG GAGAGTTTGG
 CACGAGGAGA GAGGGGCAAA GCGGTGTAAG GCAGTGTGTA TAACAGTGGC CCATGGAATT GATCATGGGT AAAGAGAAAA
 CAAGGACATG CGAGGAGGTG ATAAATAGAN CAAAACAAAG CA

SEQ ID NO:456: (Length of Sequence = 340 Nucleotides)

CTAATTATG TTGAGATCT TCAATGAAAT TAGTTACTAA TATTINGCTT TATTCTTCTC AAAAGATTTA ACATGATAAT
 TCTGACCTAA TCAAAAAA AAAAATTCAT GGGCCACTGT TTTGCATGTA ATATGTAAAG NCTCACCTTG ATGTTAAACT
 CCAACCTTG GCTGAAACAG GTTAATGATC ATTTGTINGT ATTTATTCT ATAAATAGTT TGAAGTTGGC CAGGCCTGGT
 GCGTCTCGC TGTGCTCCC AGGGTTGGAG TTCGGTGGCG CAAATCTGG CTTCACTGCA AGCTTCGGC TCCCGGGGT
 TCACACCATT CTCCCTGCCT

SEQ ID NO:457: (Length of Sequence = 338 Nucleotides)

ATGAAAAAGT CTCAGAGAT TATCAGTGGG CGATGACAT TIGCCCTCTG TTGCTATTCT TTGACATTCA TGAGATTGTC
 CTACAAGGTA CAGCCTCGGA ACTGGCTTCT GTTGCATGC CAGCAACAA ATGAAGTAGC CCAGCTCATC CAGGGAGGGC
 GGCTTATCAA ACACGAGATG ACTAAAACGG CATCTGCATA ACAATGGAAA AGGAAGAACA AGGTCTTGAA GGGACAGCAT
 TGCCAGCTGC TGCTGAGTCA CAGATTCAT TATAAATAGC CTCCTAAGG AAAATACACT GAATGCTATT TTTTACTNAA
 CCAATCTATT TTTATAGG

SEQ ID NO:458: (Length of Sequence = 370 Nucleotides)

GTTCCTTTTC GGAGCTGAAC CAAAGAATGT GCACCTCTT TCTCTAGTGC TGTGGTGTCT GCTTATTTTT GTATTGTGTC
 TTTCCATCCA TCTTCTGTGA TCACAAGGCA TTCTTAAGGT TTCTAGCAC GACTTGCGGA CATCCAGACT CGTGGGGGGC
 CCACCCATGG CTCGGTAAGC CAGCAGCCCA GGGCACTGGC ACTACCATGA GGCACATCAT TAATGCTGTC ATACAGCTGT
 TACCCGACGG CGCACACAAG CAGCAGGTCA ACTGCCAAGG GGGCCCCCAT CACGGTCACC AGGCGTGCCC CACGTTGCAA
 AGGAGGAAAA ACAAAATTCC TGGTTCCGT GTGGGACAGT AAAGCAGATG

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TTACTTCAGT AAAACAAGCC ACAGCAACAT TATGCTCTGC AGAGTCTTCT GTTCACCTTT GGGATGGAAA AGAGCTGCTT
CTCCTAGGNN GGCAACTAAG GCCCAGGACC AAAACTCCCA TCTCCTA

SEQ ID NO:447: (Length of Sequence = 295 Nucleotides)

CTGCAAAACC TTCAGCATTT AGCTAAAGTT ATTTACAAT TCAATGCTTG TCTTGCACTG TCCTGGTCAT TTAAAACTG
GTATCTCTTC AATAGCAAAT AGTATCATA CAGACCTA AATTTGGAGG GAAAGTGGTT TCTATTGCAG ATGGATGTAA
TTAAAAITGG TGTAAATCAC AGGGTACAGA ATTCTTATCT GGTAGAATT CTGACTTTTT TTTTAAAGAA GAAAAAATAT
ATCCAGATCT GTATCCACAT GCTATTTAAA TGCTCAGENC AAAAAGAAGC CACTA

SEQ ID NO:448: (Length of Sequence = 233 Nucleotides)

CAGAATCAGC CCAAATGCC ATCAATCAAC TGTGCATAAA GAAACTGTGA TATATATATA TCATAGAAGT TCAAACAGAA
AAAATACAAA AAACTTAGCA GAGGATGTGA TCCTTTGCCG TTATTTTGA TGACCATGCC ATCTTCTAAT CCCAGAAAA
AAACTGGAAA ACAGAATAAA TATAATTINC TGATTAINCT TATGTAACAT AAATGGAATA TATATATATA TAT

SEQ ID NO:449: (Length of Sequence = 341 Nucleotides)

ACITCCTTCC TCAGGCTCCT GTACCAATCT TCAATTCCT TGGGATGTCC TAGTCTAAAA CATTTATTTC ATTGAAAGG
AAAAATATCA ATTTCTATCT AAATTGGAGT AAGATTCAAT TCAGATGTGT TTATTTACAA AACATAAGTT TGTATTTAT
CTGTGTTTAA TTGATCCNG GAACATTACA TGTAAGAAC ATTCCATGTA AAGAACCAGG CAACTTGGCC AGGCATGGTG
GCTCACACCT GNTAACCCCA GCACTTTTGG GAGGGCCAAG GCAGGTGAAT TGGTTGAGAC CAGGNGGPTC AAGACCCAGC
CTGGGGCAAA TATTGGCGAA A

SEQ ID NO:450: (Length of Sequence = 313 Nucleotides)

TTTTTTTTT GACACAGTTT CCAGTCCTGG AAACCTTAG CTAATCTTGA GCATTCCTTC AATGGTGGGA ATGGCAACA
GATCACCATA GTATTAATAC TCTGTGTAAT TTTATCACTA GAATGGTTAA TTCCATATC ATAGTAGAGC TGTGTCAGAT
ATTTTGAAAT CCCATTATAC TCACTGCCAC TTCAAGATTA CTGTAGTTGT TAGAACAGCT GCTAGATCTT ATTACTTAAT
AAATTAATAA AGTGTGAATA TAACTATATA ACCATTTTNA AAATGTTTTT TGGATAACTT TCAATATAAT TGG

SEQ ID NO:451: (Length of Sequence = 351 Nucleotides)

GGGCGGCTC CTGGGCAACC ACCCAGCTCA TTGCGGAGC GGCTCCCTC CTGGGGTGA GTGTCTGGG CCTGAGTCTG
CAGCCTCAGC CATCTGTCC CCAACTTGAT CTCCACTGC TAGTTACAAA CAAATCGCCC GGCCTGTGCA AACCCTCTG
GCTCAGTCCC CAGTCCCGG GGGCATCATT TCATTCTTTC CTAGCCGTGA AGGTTTCTCC TGAAAAATCT ATTGTTAGTC
TAATATGAAT TTCTAATAT GTGACTTAAG GCTTTTCTCT TGCTGCTTTT AAAATTTTCT CTTTTGTCTT TGACTTTGAC
AATTTGGCTA TAATGTATGT TGGAGAGGAC C

SEQ ID NO:452: (Length of Sequence = 363 Nucleotides)

GACAAGGGAG AATTCCTGCT TTACCTATGG ACTGGCTTAA GCCGTGTGC ATCCGAGGAA TGTTCAAAT GTGTCTGTGT
TTCTCTTAC ATTCCTTATT GTACCTCATT GTCAATTCA CTTTGTAAA TTCCACCTAA CATTTAATTA TTTTAAATTT
CTCCGTATG AAGTTATTTT AAGACACTGG AATAAGTGA GCTTGTGTTA TAACAGCATA GGATTATAAA CAACCTAAAG
AGTCAGCAGT GACATTGATG GCACATGCAT ACAATGGAAT ATTCTGTAGC TGTTAAATA ATAANGAAGA TCCTGCTCTG
TGTATTTGAT ATGGGAAGGC CCCCCAAGGT CTACAGTTAA GGG

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CACCATGTTG CCCAGGCTGG TCTCAAATC CTGAACTCAG GTGATCTACC CGCCTTCCAA AGTACTGGGA TTACAGGCAT
GAGCCACCAT AATAA

SEQ ID NO:441: (Length of Sequence = 356 Nucleotides)

ACTAATTGIG TTCTGCTTC AACCTGCATT TCCAGAGGTG CCTGTGGTC TGTAAATGGT TCTGGCATGT TTATAGGTAT
TACAAAACCA AGTCTTATTT TGCATTTTAC AGGATTTAAG ATGAATAAAG TGATGTGGTT GTGCTAGGTT AGAGTTGTAC
AAATTATACT CCCATOGGG ATGGTGGCGT CCCAGGCCCTA CAACCTGACC TCTGCCCTCA CGCCCATCGT CACGGCTCC
CGTGCTTCA ACGAGGAGCC CCTGACGCTG GCGGGCTTTC AGCAGGNC CCGCCAACT CAGTGACGTG GTGCAGCTCA
TCTTCTGGG TGGGACTCCC AATCCCTTT CCGTTT

SEQ ID NO:442: (Length of Sequence = 371 Nucleotides)

GATGATTTTG TATCTTTTTC TATTTATGA GATAATCAAA TGATTTTGT CCTCGTTCT ATTGATGTA TGTATTGA
TCATGTTTAT TGATTGTCAT ATGGTGAGCC ATCCTTGTAT TCCTGGTATA AATGCCACT GATCATGGTA TATNATCTTT
TINATGTCT ATTGGATTG GTTGCCAGT ATTTGTGTA GAATTTTTTC ATCTGTCT ATTACGGATA TTGGCCTGTA
GTTTTTTTG CTGTGTTCT CTTGGTTT GATATCAGGA TAATGCTAGC TTTGTAGAAT GAGTNAGGA GGAGTTATCT
ACTCTCAAT TTTTGGGAAC AGTGCAGAA CTGTGTGTG TTTTGAACA G

SEQ ID NO:443: (Length of Sequence = 329 Nucleotides)

TGAATGCCT TTATTTTTTN ATTTCCATC CAGAAACCC AGTGTGATG TGAAGCAGC ATGAAAACAA CATCTCCCCA
GGCCTCGCAG TAGAGGCGAA GGAACAGAG CTGCCATGT GCCTGINTCT AAAGACGCCA CCTCAGGTT GATGTCACCT
GTGGGAGACC GGTCCACT ACAGACACCA GTGATGGTC CACCAGGCC CAAGCTCCAG CCGCTGAGT CCCCAGACA
CAGGCTCATT AAATAGCTC GTACAAAAC CCAAGGGTGT CCTCCAGCT GGTAAAAAT TGGCAATTT CTACTTGGAG
GTCTGCTGT

SEQ ID NO:444: (Length of Sequence = 358 Nucleotides)

TTTTTTTTTA AGTACATAGG TCTTTATTA AACACTGATT TTTTTTTTAA ATATATACAC ACAAACCTA GTTCAGCAAG
GCTTCATGAT ATACACCAAT TCCAAAATA AACAAATCAA TGGTCCAGGT GTAGAATGCC AGATTCCCTT TATCATCTGC
GAGGAAAGA GAAGCAGGAT GAGGAAGAT GAGGGAAGGC GGGGACAGC TCTGCCAGA NGAGCTGCCG CCTCCTGGCA
CAGCAAACGC TCCAGGCTG GGCCCTGTC ATATCTGGAG TCGGAGGGAG ACTCCCATG GCGCTTTG GACTGAAAGG
CCAAGGCTG TCACCAGGTC CCGAAGAGA GGGAGGCA

SEQ ID NO:445: (Length of Sequence = 302 Nucleotides)

TCAGAACGGT GAGAAATAA TTGCTGTTGT TTATAAGTA ACCTGTTTAT GTTATTTTTT TATAGAAGCC TGATCAGAT
AAGACAATAT TGGATAGAAT ATTGAGGAT GTCTTGCTC CAATGTTGGC CCCCCTGTAC TGAGCTCTAA TCTACACTCA
CCTAAAAAT TATAAATCA TAATAAACT GAAAAAGTCA AACTCTCAAT TGCAATCCAG CACAAATATC ACAGTGNIT
ATTAAAAA TTATGTCAAG GCCCTAAAA GCTAAATCC NCAGNTCTG TAATATTTCT CT

SEQ ID NO:446: (Length of Sequence = 367 Nucleotides)

ATATATATAT ATACACACAC ACACATACAT ACATACATAC ATATACATAA CCTGTTTGG GTAAGGCCTA TTGACAGAAG
CCGATATCT GGGTGAAGT TAGAAGATG GCAAGGAAT CTTATCTCAG AGTTTCAACA CTGCGACAAT GTGGAGAGAA
GTCTCCTGGG AAAATGCAGA TGCCCAATA CTTCCAAAAG AATCAGGGAA GTTGGAGTAT TTTTGAGATT TACAGTGTCT

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CTTTTTTINAC CINCACAACA AGGCACTCCT CTGCAACCCA GTCGGAATTT CAGTGCCTGT GGGTCAAAGT

SEQ ID NO:435: (Length of Sequence = 427 Nucleotides)

TCATAAACA GTAGATTTAT TTTATGTAGA TTTGTTTTTC TATAAAAATA TATTTATGTG TTCACAGGAA AAAAGTTGAG
 TTGGTATGTG GGGGTGACTT TCAGATACAT AATTAGTTAA AGGTTTGCTT ATGAAGTTAG AAGGCATCTT AGCTTTTATC
 ATTTTCAAT TTTTCTTCAT AAAAAAGAAC ACCCTGTGAC AAAGATAAGG TAACTGAGAT TATTATTAGC ACTTTAGAGT
 TGAGAGAGTT TGAAATAAAA AGGTTAAGCA ACCTGCCTAA TGTTTATGTA CAAAATCAGT GCTGGAGCCA GGAAGAGAAT
 TTGGATTTTC CCAACCTTG GACAGTTCTC TAGGGACTCA TGCCACCAA CCATTCCTGA GACTATATAC AATCAATTAC
 ATTAAATGA TATTGACAGT AGACTAG

SEQ ID NO:436: (Length of Sequence = 249 Nucleotides)

TCAAATAACC AGGAGGGGGA CAGAAGATGA TGGCAAGGCA GACTGGGCAG TGTTTTNTAG ACACAGAACA AAGAATCAGA
 ATTIGAAAAA AGANGAAAAA CAAATCTNCG CAGCTGCAAC TTTAAAGTAT CACCTTTATA GATGGCAGGG ATTTCCATT
 TGCAAATGGA ATCTAAGATT TCAATGTGNA ATCTTAGAAT GCAGTTTTAC CACTTCAGT CINGTATTTG TGGTGGCCAT
 GTGGTGAGT

SEQ ID NO:437: (Length of Sequence = 404 Nucleotides)

GTCAATCACC CTAATCCCTC TTTCACCTTC ACAGAACCTT CACACTCCAA TGTACTTGCT GTTTGTAGAT GCTCCTATAA
 ACAGAAAGCT CTGGGAGACA GGTGTCTGT TATTCTTGCT CTCTGTCATA TCTCTGGGCC TATCACAAGT ACTCAAAGCA
 TAGAAGTTCA ATAAATATGT GTTCAATGTA AGAAATGATC AGTGATTCTC AAGCTGCAGT GCGTTCAGGA TAACCTAGAC
 AGCCTGTTAG CACGCTTCAC TGNNNCCAC CCCACAGTT TCAGGTCTGG TCTGGGNTGG GCGCCAATAA TCTGTATTCC
 TAAAAGTCCC CAAGCAATGC TGGTGTCTGT CGTCCAGGGA CCATGCTTAA AGAACCACCC GGAATAGGAC TGGTGGACAA
 AAGG

SEQ ID NO:438: (Length of Sequence = 337 Nucleotides)

CTGCAACTTA TACCTTCCAT TTAATAAGT CCCAGTATGT GTCAAAGTAG TTTTCATTCC TCACAGCCAT GTTATGAGCT
 AAATATCACT AACTTTCCCT TTCAAAGGTG AAATAAAGT AGACTCTCGA AGATTAACTT GCCCAAGTTC ACCTAGCTCG
 TTAGGAGGCA CAGGTGGGAC TTGAACCCAG TTCTTTCTGA ATTCAAACC TCCAAATGT CTGTACATC AAGCTGCTTC
 AATGAGATGC TAGAAAATCA GGACAGTGAG CAAGCTGGAG ATAANGGAAG ATATGGAGGA ACACGGGAAG TGTGATCCTC
 ACACACATAC CCTGCAG

SEQ ID NO:439: (Length of Sequence = 380 Nucleotides)

CATCGTGTAT GAAGGTAGCC ATTTTGTACA TGTACCTTG TTA AAAACAA AAGAGCAGCA ACATGTTTAG AGTGGTGTCT
 ATAGATAGAA CACTGCTGTT ATGTTTAAGG AAAATTGGGG CGGGGCGAGA AAAGATCAAT ATGACTAGTT AGAAGACTAT
 TAAGGAGAAC TTTGTACATG AATTATGGAT GTAAGAAITA GAAAAAATA GATGATCATG TTCAGAAATT TAGCTTTTTT
 ACAATTGTAG TGGAAAAGAA AACTCCTAGA GTAATGAATC AATGGTATCC TACAAAAGA GAGGTGCCAA AAATACCATG
 AAATATTATA TTA AAAAATT CACACGNATA GGTAGTTATA ATATGTAAAG GCCAGACTTC

SEQ ID NO:440: (Length of Sequence = 335 Nucleotides)

CCCTGAGCTT TTATTGACCA GTGGACTGTG ACTTTTGATG TAATTTTATT TTTGAGAGAG GGTCTTGCTC TGTCACCCAG
 GCTGGAGTGC AATGGGGTGA TCTGGCTCA CTGCAACCTC CGCCTCACGG GCTCCAGTGA TTCTCCTGCC TCAGCCTCCC
 GAGTAGCTGG GACTACAGGT GCACACCACC TTGGCTGGCT AGTTTATGTA ATTTTTTGTA TGTCTGTGGA GACAGGGTTT

SEQ ID NO:429: (Length of Sequence = 422 Nucleotides)

GAGGGTTGGA GACAGGAGAC AGTGGGGTGG GAAATCCAAA TCTCAACTGC TTTTGTACTG TCTCCTGCTC COGAGTGCCC
CANAGCCCAT GCAGACCCCTC TGCTGTCTAT GATATCCTGT TCAGCCCTCA ACTTCTCTTA CCATCCCTGC AACTGGGGTT
CACTGTGAGC CAAACCAGTT TGCTTCTGT TTTCTAAAAG CAGGCAGCCC TTCAGGACTG TMTCAITCAA GGCATTTCCC
AOCCTINTTC TCCACTCATA TOCCTTCCCA AACTGCCTTT CCTCATTTCT COGTCTCCAG GGAGAGGGAC TNCAGGCTAC
CACAGNCAAA AATGGTGGTC TTCAGTCTTA CGTAAGNCAA NCTGTGTGAG TGTGTAAGGA CTNAGGGTTG CTCACAAGGG
GACACACAGA NGTGGATGCC AG

SEQ ID NO:430: (Length of Sequence = 332 Nucleotides)

CGCGATCAGC ACCCGGGACA GCGCCACCGC CCACTGTCAG GGGNTGGGGT CCGGGCGGGG CTNGCGCTC GGGTCTCCC
GGNAGINTCC CGTCCAGCCG TOGAGCAGGG TGCTTGANTN TMTCTGAGA AAAGACTCTA GGACCCCGCC ACCATGTTCC
CGGAGCCCCC AACCCCGGGG CCTCCATCCG CGANACGCC TCCGACTCC AGTGCATCA GCCACGGCC AGTGCCCCC
TGGGCCCTGG NCACCATCGT GCTGGTCTNA GGCTCCINA TCTTCAGCTG CTGTTCTGT CTCTACCGGA AGAGCTGTG
GAGGCGGACA GG

SEQ ID NO:431: (Length of Sequence = 413 Nucleotides)

TGTCAATTAT TAAGATGGGG GACATCCAAG CACCTGGAAC AAAAAGGACA CTAAGAATGG GAGAAGAATA CACAAAGGGA
GGTAGTACAG GGCCAATAAC AGATTTTGG AATTTTCAA ATTTCTCTT GAAGTAATTT TACAGTCAGT AAATGGAAGT
GGAAAAGAGG AATAGAAGAG CATTTTCATG ATTTTTTTT TCTCTGTAC TTACACATCT CATGACCTCA TGTCCCGA
ACTTAACACT TAGTGGGGT CTAGTAGATA TTTGGGGT AAAAGATGTT TGTGTTTTG CATTTGTTC TGTTTGTG
GCTAGCCTGT GAATCTAGCA TTGTACGTGA GAAAGTGCAT TTCAGATTGA AAGCAACTGG GTTTTGAAA TGAACCTCAA
TAACATATCC CAG

SEQ ID NO:432: (Length of Sequence = 292 Nucleotides)

TTACCGTGT TAGCCAGGAC GGTCTGATC TCTGACCTT GIGATCTGCC CACCTGGCC TCCAAAGTG CTGGTATTAC
AGGCGTGAGC ACCCGCCCG GCCACCATC ACTAATTTT AAGAAATGTG GAAGTGTCT ATATTNCTT CCACTCCAT
AGCTCCAACA TTGTGGCTA TTATGAATTT GGCTATTAG TGATGCCAAC AATATTAAAT GAAAAAAGA TATAGCAGTA
TAGTTGAAGG AGGAAGCTGA AAGAAAACGG TCCATNGTG AGGAAAAGGC CC

SEQ ID NO:433: (Length of Sequence = 335 Nucleotides)

TTTTTTCTC AGCAGAGGAT TTTATGGTG GTCACCTGTG GCACAGGTTA GAGGAGCOGA AGTGCTGINT TTGTGGTGG
GGGGGACCA CAAACCCCG CCTGCCCTC TTGCTTACAT AGGCTTCCCG CCTAGAAGCG CANCATGAAC ATGCCGCTAC
GGATCCGGTT GTAGTCTGGG AGCTGCTCAA TGGGGCCATA TCCAGCCACT GCTGGGGCAC TGGTCATAGA TGTACTINGA
GCAGATCTCA GTTACCACAC TGGCATCCAC CTCGCAAT COGGCTTCC CATTCAGCCA GGGGGGNATG CGGNGGGCC
ATAGGTCAGG AGGCT

SEQ ID NO:434: (Length of Sequence = 390 Nucleotides)

GTGCTGACT GCTGATTGGA GATGAOGTGT ACCCATCTC TAGACAGTCT GTGCTTTCC TGTCTTTGGA GCTTCCAGTT
CCACCCCAT CAGTTTTTT CTGACCACTC CATCTGCCT TATTTCTCTC TCTTCTCTT TGACTGGAAG AGTACTCATC
TTTTCTAACA TCTTTTATA AACTGTTTTG ATTTCACTTA TATGATTTT NAACGTATAA TGTGCTGGTG TTCTATTTCC
TCAGTTAGAT CAGAAGGCC CTAAAGACAG GGCTCCATTG GTGTTAACT GCCATCTCA AGGTCTGGGA CTTGATTTCN

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SEQ ID NO:423: (Length of Sequence = 391 Nucleotides)

CTGTCTCTTA TCTGGGCAAG CTTTAGACAT ACTAGCTTGG TTGGAACTG ATATTAAAG CCTAAAACAT GTAACTTTNC
 TTATCAGGTT ACTATCATGG GGAATAAG ATTCTGGTT TTTTGTATGT NCCATAACTA TACTTTAGTA AGCCCTGATA
 TACGGTGTTA ATTTTCCINC AGTGAAGGAA ACATGAAGAT ATATTATGT GCACACATAC ATATATATGT ATATATAACG
 TATATTCAA CATGCACTCA GAGGAAGTTA GGGAGAGAAG TTTCTAGCTA AACATGATCT TGTGAAATC TTCCATATGT
 GGAAAAGTCG TCAGTTCATC TGACATAGAG CAATACCATA CATATATACA CACAGGGTGC TATGGTATAC A

SEQ ID NO:424: (Length of Sequence = 379 Nucleotides)

TGGGGAGCCT GAGGCATGAG AATCGCTGA GCCCTGNGG TGGAGGTGC AGTGAGCTGA GACCCCGTCA CTGAACTCCA
 GCCTGGGTGA CAGAGCAAGA CTCTGTATCA AAAAAACAA CAAACANACA AACAAAAAG CCTATTATAA AACAAAGGA
 AATGCTGAAG TCTAGTGCAC CAAGACATAC TGAATTTCAA ACTAAATAA TTAATAATTAT CATGTACATT CCACTACATG
 TCAAACAGG AAAANCCATA GTATTATAGT TGATATGAAA TGANGATTAC ATACANCAGT AATACAGAGN AAACATGAAG
 CTGCTTATAT TTATTTGGG ATAAGGNCAN CAGGGGCCAA TGATTTTCAC TGCAGATGT

SEQ ID NO:425: (Length of Sequence = 448 Nucleotides)

TCCACAGGGC GGCTGGGGT CTGGAGATGG GCGCTGGGCC CACGGGACGC AGATGGGGCC ACGCTCTGCC CGTGGCTGGC
 CCAAGTTCCT GGTCTGCACT GCTGCCTCCT CCCAGCACCC CCTGGGSCAC AGAGGGCAGG GTCACAGCTG GGAAGAGGTG
 GGGGGTAGAA ACCAAGGCTG GCAGAAGTNT AGCCGGGCTC CCTGATAAAT GCTGGAGGAC CCCAGGGCAC CTGCACCTAC
 TGTACCTCT CTGAGAGCAT TTGTATGATC TCATGTCTCA GCTCTNNGAG GCTGGAGGTC CCAGAAAACC AAGGTATGGG
 TAAGATTGAG TCTCTGGGTG AGTACCCAGT TNCCTGGCTC TAGATGGGCC CTTTTCCTT GGTGTCTCT AAATGATTGG
 ATGAGGCCAG GTGCTCTCT TGGAGTCTT TCTGTAAAGG CAACTGAT

SEQ ID NO:426: (Length of Sequence = 417 Nucleotides)

GCCTGNTCA TCGCTGCTT TCTCTCTTG TCAGAGTCAG TGACACTGAC ATTAAGGTCA TCGAATATCA ACCAGGTCTT
 GAGGACCTTG GTGTGTTTCC TCTCTCTTA GTCTCCAGAC CCCAGCCTGT TCATCTCTGA GCTTCTCTG GCACCCCTTC
 CTTGGGCCA AGCCAAGTAA GAAATCAGCA GGCCCAAGT GGTGCTTGGG AGGCCGGGGC AGTGCCAGG GCAGTCTCTA
 TACCATCTC CCACTGGCTT CCTCTCTGCC TGCTCTTAGC CGCCACACAT ATCTCAGCTG TCGAATCCGA TTAGGGNTTC
 TGNCCAGTGA GCCAGACAAG GAGGCCACTN GGCAGGGGAG AGAGAGACAA GGACGCCAAG CAGGGATTGG CAGAAGGAAG
 GTGGAGACAT GGCTCAA

SEQ ID NO:427: (Length of Sequence = 317 Nucleotides)

AACCTGTCT CTACTAAAAA TACAAAAAT TAGCTGGGCG TGGTGGTGG CGCCTGTAGT CCCAGCTACT CGGGAGGCTG
 AGGCAGGAGA ATGGTGTGAA CCCAGGAGGC GGANTGTCAG TGAGCCGAGA TAGTGCTCT GCACTCCAGC CTGGGTGACA
 GAGCGAGACT CGTCTCAA AAAAAGGGCT GATAATGATA AACAGTGAGC ACTCCGGTCC TTTTCTTAC GTTTCTCTT
 TTTCTTCT CTCCACCCA CAAGTTTGC TTTTAACCA AGGTGTCTCT GCTTGATGGA AATTCACATG CTAGTCT

SEQ ID NO:428: (Length of Sequence = 296 Nucleotides)

GTAATTACAG TATTINACG TAGAGACGGG TTTCTCCATG TTGGTCAGGC TGGTCTCGAA CTCCTGACCT CGGGTGATCC
 GCCTGCCTCG GCGTCCCAAA GTACTGGGAT TACAGGTATG AGCCACCGTG CCCAGCCGGT TTTTTTTTTT TTTTTGTAT
 AGCAATGGAA GAATGGCTC GTACACACGN TAGAGTGGA AGTCCAGGC ACCAAGGNTT CCCACCTAG AAGCAAGCTC
 AGGGCTTTCT CTTATCTT CCAGGGAGAG CACTGAGAGA TGATGGGGG TTGGCA

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SEQ ID NO:416: (Length of Sequence = 343 Nucleotides)

GIATTTCAAG TGTTTTATTT GCTTTCGTG GTGTCAAATT TGGGGTCTCC TAGAGCCCAG CCCAGGCAG AATCOGGCAT
 ATCCTTCTCC GCCTGGGGG CCCGGGACAC AGGAGTTTCA GAAAAGGCAC TGGCAAAAGT NCTAGGGCGG GGGTCAGGGA
 GAAGCCACAC TGAGCCTGGA GGGACCGGG CCTCCTTCGG CGGCAGAAAA CACAGTCACC TTINGCAGGG AAGGGTTTTT
 NCCTAGAAAG AAATTTAAGA CAAGATAAAA ACCTGAGATG TTAGAGGAGC CCCAGAACC AAGCOGGTGC TNCCTGGGC
 AANCAGAGAG TGAACCGGC TTT

SEQ ID NO:417: (Length of Sequence = 202 Nucleotides)

TATTTCTCTG TGAAAAGGG GAAAATAAAA GGAATAAAT AAAAAGGCA CAGTTGACAC ACAAAAAAA ACCAATGATG
 GGGAGGACGG GAGGTGGAGA AGTAAATGGG GGAGGGGNTC CCATTACAGC AGCAGGATCC AGTACCCGG GATGCTCACA
 TCINTCCCTN ACGTGGGCGG TGTAGCCCTT TCCTCCAAG GT

SEQ ID NO:418: (Length of Sequence = 299 Nucleotides)

CACCAATTGG CTGCAGAGCT GTCTTCAGGA TCATAGGCCA CTGCCAGAGT CTTGGAGAGA GGGAGAGATG GAGAGGAAGG
 GAGTGAGCTT CGGTGGTCTG ATTTCTGGCT CAACGACGCA GGAACCTCAG GTTCAAAAGC AGCTGACAAG AGCCAGAGA
 CCGTCTTCTT GCGTCCGGC AGAGCCTTCT GGTGGCCCGA CACCAGGCA NGGAGGGAAG GCCCTGAAAT CCGTTTTTN
 TGGCAAGATT NGTTTCCAAG AGGAGATAAT GGCTCAATTT TGTCTTCCA AGTTGATCA

SEQ ID NO:419: (Length of Sequence = 223 Nucleotides)

ATGTGTGGGA AGGTAAACAT TTCCATGGT TTTNATTTN CCCAAAAGTA TTTATGTATT GATTIATTTG GNTCTGACTC
 AGGCGACGTA CTGTAAGACG ATATTACTTT AATCATCTTC ACATCAGTAT TTATGGAATA GCCACAGGTG CCTCATCCTT
 TAGTAGGAGT TAATTATACA TTINCTGGCC GAGTAAACAT NTCGAATGG TATGTATGTA TTT

SEQ ID NO:420: (Length of Sequence = 406 Nucleotides)

TTTAAATATT AAGTAAAGTA TATAACTTGC CCTATGCCAT ATTGCTTTAA TCAGGGGACT GAGCATCACA TTTAGATTTG
 ATGAGTTTGG GAAAAGTTCT CAAACATCCA GACCCATGGA CCTTAAGAAT TACTGCAGAA ATCTCCTTCA ATATAGTCAT
 AGGGAGCATT AATGCTTTTG TGGTACTAAA CATATTTTIG AGCTTAGATA CAAATCCTTC TTGTCTGAA CTGATAGGGT
 AGGAATGTGT TAGGTGCTTC AAATCCAGAT CTTTCAGGGG TTGCCACCTA AACTCATCTT TATGAGTAAC TCTAGATAAT
 AATACACTTT GGTATCTTCC AAAGTGCTTA TCTAGGCATG GAAAAGTTCA GTAAATTATCA TGAGGNCCTG TTTTATAGGT
 AGGTCC

SEQ ID NO:421: (Length of Sequence = 281 Nucleotides)

ATCCAGATTA CTGACTTGTA CACAATGGAC CATATGINCT GTCCAAAATA CACCTACATT AACTGTGTG GAACANGAAC
 CTGGGCTTTG CAAAAAGAA TTTATGATTA AAATGTAAAC CCCCCAAA AAAAAATGAAG CTTAGAATTA AAGGTAGCCT
 TTTACCCAGA TTGTTACCA GNTTGTA AAA TTCTAATATG GTTCATTAC TGTTACAAA TAATTCATAT TTGNCCTAT
 GGTTTAAGGG CTCCAGATTG AAAAGGTGCT CTGAACCTCT G

SEQ ID NO:422: (Length of Sequence = 220 Nucleotides)

TTTGTATTT TAATAGAGAC GGGGTTTTC CATGTTGGCC AGGCTGGTTT TGAACCTCTG ACTTCAGGTG ATCTGCCTGC
 CTCGGTCTCC CAAAGTGCTG GGATTACAGG CTTAGCACT GINACTGTCT GCCTGGCTGG CTGGCTGGCT GCCTTTCTTT
 CTTTCINTTT TCINTCTCTC TCTCTCTCTC TCTTCCTTTC TTTCTTCTT CTTTCCTTCC

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SEQ ID NO:409: (Length of Sequence = 233 Nucleotides)

AAGAGACAGG GNCATATTCT GTCAACCTGG CTGGACTGCA ATGGTGTGAT CACAACCTAC TGCAGCCTTG AACTCCTGGA
 CTCAGCANT CCTNCCACCC CAGCCTCCTG AGCAGTTAGG ACTACAGATG GGTGCCACCA TGCCAGCTA ATTTCTAAAT
 TTTTITTAGA GACAGGGTCT TGCTATATTA CCCAGGCTGG TCTCAAATC CTTGGGCTCA AGTGATCCTC CTT

SEQ ID NO:410: (Length of Sequence = 295 Nucleotides)

GACAGGGGGT GGGGAATTCT ACTCCATGGT ATCTTCAGAG CTAGGATAAT GCTCCTTATG CAATCCCACT GCATATGACC
 ATGGCAGTAG AACAGTTCA ATTACTACAC TGGATGCGTT AAGTGTGCTT TCCTAGCAGA AAGCACCAGG GTGGAGTCAA
 CAGTTCACAT GCTAATACTT GGAAGTATTT CTAGAAGGGG GTGCTCAATA GAGGCGAGAC ATGATGCAAG NNCTTCATAC
 TAGAAAGGTG TCTGTGTGT GCATGCACAG CTGGATGGGG GCACACAGGA GCAAG

SEQ ID NO:411: (Length of Sequence = 304 Nucleotides)

AATAAAAGA CCATTAACCTT AAAGTGGTGT TAAATGCTTT GTAAAGCTGA GATCTAAATG GGGACAAGGC AGGTGGAGGG
 GAGGCCAGTG TACATGTAAA TGCCACAGC CCAGCATGGG GTTTCCTCC CAAGNCCCA GCACCAACCT CTGAGCCCAA
 GACCTGCTT GAAAACAAGC AGATACCGAT TGNITCATCC TATTTATGGA CATGTAGGTC TAGTTGCATT TTCACTNGGG
 GGAGGGGGGA AGGTGAATTA TGTAACTTT TAATGATCTA TTCAGGCAGT AGAGCTCTTA AGGG

SEQ ID NO:412: (Length of Sequence = 250 Nucleotides)

CAGGTGGCA CTATCACGCC CGGATAATTT TTTTGTGTTT TAGTAGAGAC GGGGTTTCAA CATGCTGCTC AGGCTGGTCT
 CAACTACCGA CCTCGTGATC CGTCCACCGC GGCTCCCAA AGTGCTGGGA TCACAGGCGT GAGCACCNCT CTTGGNCACA
 GGTGAGACC CTTTCTATAT AAGAAAGAGA AAAATGTCTC TNANTCACA GAGAATGCTA ACAACGGGG AAAGCACAGA
 CACAAACCTG

SEQ ID NO:413: (Length of Sequence = 337 Nucleotides)

GTACTGGGAC AAGGGAAGGC AATCACAAC AACTGCCCTC AGGAAGAACT CAGTCCCTGA CTGTAGTGTG TCTTCGGGGG
 AACCAATGCC ACCNCTCC ATCCCCAGA CGGGCGAGGG GCTGCACCTT TAAAGCAGGC CATTTGGGCTT TCCGGGCTCC
 AGGGCCAGCC CACCCCGTTC CCGCTGGTGG ATCTTCTGTT GCTGCAGGAG GTGCTGCTTC TGGACAAAGC TCTTNCACA
 CTCAGTGCAG CTGTAGGGCC GNTCACCCGT NTGGATGCGC TGGTNCGNA CCAAGTCAGA TGGGTGACTG AAGCTCTTGC
 CACAAGTAAC CACAGAT

SEQ ID NO:414: (Length of Sequence = 304 Nucleotides)

GGTTTAAGAA CTGCGTTTIG GNGCCCAATC TTTGGTGAAA AATATTTTIG GGTCACTTTT GAAAAAATC CTTTCAAGG
 CAGACAGCAT TTTAATGCTT TGTCTGTTTT TCCCTGTTTG TCAGCTCTGN CACCAGCCTG AAAGATTAA AAATNCAAAT
 TAATGGAGGN TTATTTGTCC TTTACTCAGG TCACATTTCT GGGTTTAAAT GAAGNGACAG ATGCTGCTCA TATACAGGAT
 TTAGCTGCAG TTTCTTTGGA ACTTCCAGAT ATTCTGAATT CACTCCACTT CTGCAGTCTA AATG

SEQ ID NO:415: (Length of Sequence = 315 Nucleotides)

CGTTGTGGAG TGGGTGTCTT TGGATAGAAG GAGTGAGGAA CTGGGGGAGG AAGGCCTGGG GGATCCCTTG GCGGGGCTAC
 TTCTGGGGCC CGGNATGGAC ACCTGGNAGC TGCTGCGNTT GTTGGGGTCC TGGCAGGGGT GTGGTGTGGC CCTCACCCT
 CTGNTCACCT GCTCCTTCTT NACAGTGCTT GGAGAAGTTC CCGTGNATCC AGCATTTC AAGTTCGNA GCTTCTGCTC
 CATCCATCCT GTCAGTGGG GCTAGGAGGG GNCAAGCCGA AGAGCCACCC ANGNACANT TCTGTGCTT GCCTT

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SEQ ID NO:403: (Length of Sequence = 416 Nucleotides)

AGTTGACTGC TCTGATATGG AGAGACCTGT TAGTCTTGTA TATAGTCCCC AGCCGGAAAA AGCATCTCTT GAAGGTTAGG
 GCATTTTGTG AGGAGAGCTC TAGGGCTATA TCAGTCTGGA GGTATGATCT CTGATAAAGA TCATAATTCT CATCTCAGTA
 ATCTTCTTTA GAACAAAACA TTCTTCATTG TAAGCTTCTC ATTAACTGAA GGCCACCTGA TCTGAGATT TGGCTCTTAG
 AATACTCTTT NCTGTGTCTC AATCCTCATA TGGCTTACCT CTGAAATATA GAATATATTT CCTTGTGTAG CCTGGTAGAG
 TTGGGTTTTG TTTTGTTTTT CAAACAGTAA CTTTATTTG ATTGTAAAC TTCCAGATT CTGAGATGCC GCCTTACCAG
 TCTTAAGGTT GATTTT

SEQ ID NO:404: (Length of Sequence = 368 Nucleotides)

CCTCINACTC ATGTGTATGA GTAGGGCGGA GGGCTTCACT GCCTCANTTT CCCCACCTTT GGACCTTAAA TCCTCTCCTG
 ATGCTCTCA GCCCAGCCAG GAAGGAGAGC TAAGACCAAG AGGGATTAA CAGATGCAGG ACACACAGCC TTGTCTCAG
 ACCCCCCAAG TCTGAGAGAA GCAAAACACT CACCTTGAGA GCCCTGGAC TTGGAGGTGA GGTGCAGAAC CCAGGCTGGG
 TGTGTCTGA GGGGTGGTGG GGGTGGGTGG TGTGGGTGG CTGGCTGGG AATACCTTTC TTAAGCTAAG GCTGGGGCTT
 AGGGGAGGCG CAGAGGAAGG GTAAATAGTT TGCTGGGGG GGTGCTGG

SEQ ID NO:405: (Length of Sequence = 395 Nucleotides)

GACAGGTCTT CACTCTTACC ACAAGCTCA AGTCAGCTTG GCCTCTCAAG TGGAGAGATA ATCGTTCTAT AGCAAGAAGT
 ACAAGATTCT TCTGCAGACA AAACCAGCTA GCCAAGGTTC CACAACATGT GTACACGTAT AAGTCTGNTG GATCAGAAGA
 AATATGTACC CCGGAATCAG ATGTAGCCAG CCCACATACT AACAAACATC AAAGCAAGCC TAGTCAGATT GAGTCCCAT
 TGAACAATCT TTATAAGGT TTCTTCATGT TATTACAAT TCAAAGTAAA TTTACTTTAT AAGCAGCTAG GGAATTCTT
 TATTAGTAA TGTCTTACA TAAAAGTTTC ACATACTGG CTTCTGTCCA AACCATGGAT ACTTGAGCTT TGTGG

SEQ ID NO:406: (Length of Sequence = 358 Nucleotides)

GATACCTTAA TCTAAATTTT ATCTTAATTT TTATTTTAT TTCTGTCTT AAATTTTAT CTAAATTTT TNCCTAGCTT
 TTATTACACC AAGACAGCTT CACATTTTAA TTTATATATT GTACATCTCA TGTAAAGNAT TACCGTATAT AAGCTAGTGT
 CATAACTTAA GTAGCCACAT TCATTGAGTA TGTTTTATGT TTTCTCTCTG ACTGGATCTC TGATACATTC TTTCTGTCTC
 TAGCTGCTTT TATGCAAAAG GGCATTATAT GTTTGTCAAT CAACCAGGCT TCTGTGACTG TTTAGAAGGA ATTATGTAAA
 TATATAATCC NGTGGCCCTT TTCACITTTG CCATGTTT

SEQ ID NO:407: (Length of Sequence = 294 Nucleotides)

CTGTGTATAT TTAGTATCTT TNATTAAGAA GACTGGTIGA TATTTGCCCT CAGCTAATTT ATAGAAAGGA TGATCATCAA
 TGTCTCTAGT TTTCTTCTAA GTGGCTGTCT TGTGCAGGTA CATATAAAAA TNCACTATA CAAATAGCTG GACAGTTGAG
 TCTCAACTAT GAAAATCTTT TCTGGGATCA AGATCTAAGA AGTTGGTGTG TGTATGAGTG CAACCCATCA TTCTATCCCC
 TAAAAATCTG GGGTTTCTCA GCCCAAACAT TONCACTAGT AAAGTCAAGT TTCA

SEQ ID NO:408: (Length of Sequence = 367 Nucleotides)

GGCAAGGAAA GAGAGCTTTA AATTGAAAGG TTAATTTCTT AAGAGGAACC TGGGCTGAAT GACTGCAGTG TTATACCTC
 CAATCTTTCG AGGTGGGCAT GGAACACTGC TTGTATCACT CTGTGCACGG TATAAATCCA TATATCCACA AAAACACACA
 TCCATCCATC AACATATACA TGGTTTGGGA TGAGCAGGTC AATAGTTTTC AGAGGGAGTT TGTCCTTTT TTTTCTCAT
 TATACTCTTA AATTGTTGTC AGTTATCAAA CAAACAACA GANAATTTGT TTGGAAAAAC CTGTGCATAG CCTTTTCTTA
 TCAAGTGCTT TAAAATATAG NCTAAATACA CACAGGCTTG AGGCAGA

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ACAAGCTGTG TGACCATAGG CAAGTTTGAC CTTTCTGAGC TGCCATTTTC TCATGGTAAA AGAGAGATAC TAGAGGAACC
 TGCCCTCAGG GATTGTGATG GAGAATAGAG GAGATGATAC AAGTGAAGCA CTAGGCAGCA CCATACCTGG AACTAAGGGA
 AAGCCCGCAG TCAATGTTCA GTATTGTTAC ACTTGCCAGA TTGTGAAGA GGCAGGCAA CCCTTGAGTT GAGCTCAACG
 CTGGAGCCAA GATCAATGAC AGAAGGATTT TGTTTTGAAA CAGCAACTAA TGACCAGAGA GAGGAAATGG GTCATGAAGC
 TCCATGGTGC CTTTCATGAA AATGAAATGT AAGGGCGTGA TTCAGGAAAA AGGGACCACG ATCAATACCA GCAGACTCTT
 CCTATGCAC TGGG

SEQ ID NO:398: (Length of Sequence = 400 Nucleotides)

CATCAAGCTG GGAATGCCCT AAAGTGGGGG CGTGAGGAAG AGAAGGGGTG ATACCTAGAG GCTGGGGTAT CTCTGTCCCA
 AGGAGACAAA CTATAACAAG ACCCAGCAAC TGAAGGGTGA ACACCTAGCA CAGACGTATA CCTCCAGGNT CCTAGCTGCA
 TTTCTAATTC TGCTTCATCT ATGCTTGAGC ACTACTTGTT GTTAAATATA CTTAATATCA CTCTTAGCTA ATTTCTCTTA
 TGTAGATTTT TATTTATTTT TGAGGGCAAC CCAACTTCCA GGCTCTTGGG AGGAAATAGA CTGCAGCCCC TAAGTGTGAT
 CAATACCTAA TTATAACAAT AATCACTAAT AATAACTTGT GCTGCTTCAT TGTAACCTAA ATGTACACTT TTACATTTTT

SEQ ID NO:399: (Length of Sequence = 324 Nucleotides)

AAATATTTAC AATTTTACAC CTTGAGGAAG GCTCCAAAAT ATAAACACTG TACCTCTCCC TAGAGAAAAA AAAATTATTC
 TTCTCTCAA AACAGGAAT ACATTCATTT TTTCTCACTG TGTGAATCAA GTAAATATAC AAATAAACAT CTGAAACATT
 TTCTTTTAA ATATATTTAT ATAATATATA TTNTAACAG CTTTACAAAT AAAGGCAACG GTCCCTTTCT AATTTTCATG
 CCTCTCAACA GAAGGGTACA TGATGCTCCC TGAATTCAGG GGNATTTTTT TNCCTCTAT GGTACTTTGT ATTTCACTTT
 ACTT

SEQ ID NO:400: (Length of Sequence = 388 Nucleotides)

ATTAAATCTG AGTTTGTGTT GAGCATCTTT CAACATGTAC CATATTTATG ACAATCTCTT TCCATAGGAT CTATCTGTNC
 TGCAACAAGT ATTGATCTTA CAGTAAATTT TTTCACAAT TCATTAGATT CTATGTCTCT TTTCTGTTA GGAATTTTGT
 TGCAGGTAGC TATCTCTTGC CCTAGATTAT TCTCCTTGTT TAGCTGCTGA TTCTTAACT GGCTCTAGA TTTCCAGATT
 TCTTCGGTA CAGACTTTCT CTTTGCAAGT NCTTCCATCT CTAATCTTTG AGATTAACT TCTTTTGAAA TGTCTGCTG
 CTCTACTCTT GTATGCTTG GNCACAGTT CAAGCTTCCC ATCTAGCAAA ACCAGGGTTT CTAATATT

SEQ ID NO:401: (Length of Sequence = 339 Nucleotides)

GTITATGCT CAAAACAAG AATTCAGAAG CAAAGGTGGA GAGACTGTGG GTTGGGAGA TGGCAGGAAG GGGGCAAGGC
 CTGTCCAG CTCTCCCTT TGTCTCTTT CTGACCTCC TGGCCGAGT CAGGCCTAGG GCCAGGCAT CTGGAGGGG
 GGCACCTTG TGGCCAAGGG AACAGTAGAG CTATCGGGG CAGTCCCTGA GGGGTGCCCT GGCAGGAGG GGCTGCAAGA
 TTTCAGGGA GGCAGAGTTC CCTCCAGGA ATCCAAAGC CGGTAGGGCG GGGGCAAGG CCCCTCGTTT GSCAACTNAG
 AAGAGGCGGC TTTTGGGCG

SEQ ID NO:402: (Length of Sequence = 400 Nucleotides)

TGTCAGTGT ATGAGGAGCT CCCAGCGAGA AATGAAAGT TCTATGTTTA TGAAATAAA AAGGAAGCAT TGCAAGCTGT
 CAAGATGATC AAAGGGTCCC GATTTAAAGC TTTTCTACC AGAGAAGAGC CTGAGAAATT TGCTAGAGGA ATTGTGATT
 ATTTCCCTTC TCCAAGCAAA ACGTCCCTAC CACTGTCTCC TATGAAAACA GCTCCACTCT TTAGCAATGA CAGGTGAAA
 GATGGTTTGT GCTTGTGGA ATCAGAAACA GTCAACAAG AGCGAGCGAA CAGTTACAAA AATCCCGCA CGCAGGACCT
 CACCGCCAAG CTTTCGGAAA AGCTGTGAG GAAAGGGAGG AGGAGGACAN CTTTCTGAC CTATCTGGG AGCAACCCCC

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CCACCCCTGC AGGNTTCAAA GGGCCTGCTT CCCACTCCTT GGCCTTTCCC TCCTCCTGGG AACCATTCTG GGGCAGAGCA
AAGCT

SEQ ID NO:392: (Length of Sequence = 371 Nucleotides)

ACATCCACAC AAGTACAAGA ATACAGAAGC TTCTCTAGTC AGGATGCACT AAGCACCTAA TGAGTAAACA AACITCAGCA
TATCCTCAIT GTTCTCATGG TATTAAITTG AAGATACTTA CCTCGAACT AAATCTGGTT TTAGAAGAGC TGCTTGTTGT
TCAGCTCCAA CTGGTTGGGA TACAGGCTGT AAACAGTACA GACATAAAAC TTGCTATGAT AACAGTAAAA TTCAAGCTAA
ATATACAATT TGTTACTATT CAGAAAACAC GATAGTTTTG GTTACCTTGC AAACCTGGTA GGAATATCTA TGTTATTGAA
TGTCGTATC AATCCTATTA TTAACATTAT TACCAAAGGT AAATAAAATT T

SEQ ID NO:393: (Length of Sequence = 404 Nucleotides)

CCTTTATGTA GCTTCTCTGA GGTGAAACCA CTTCTTTTTC ACCATCTAGC GCANICINTC TTTACATCAA CCATTIATTT
CAAGTGTAGT GTGCTTCAGA GTCGAAAGA GCTATTGCAG AATTGGCTGT TGTGGCTTTC TATGGACATT CACATGAAAC
CTGTACAAA CAGTCTCTA GAGACAACTT TGGGTGGATC CATGAACCTT GTGTCTAAAC TGATCCACTA TGTAGGGTGG
CTATCCACTA CTGCAATGCG CTGGAGAGC AACAACTT TCTTGCTGCA CTTIATTTTG GATTTCTATG AGAAGGTGTG
TGACATATAT ATAAATNATA ACCITCCATT AGTGGGTATT GTTCTCTCT GGGGATCCTT CTATTCCTGA CTCTCAGCC
TGGG

SEQ ID NO:394: (Length of Sequence = 416 Nucleotides)

GCCACACACT GGAGAGGGAG AGCTAGAGAG TGAGACAGCA GGGGAGCTGA GGGTGAATGG CTGCTGTAG AAGCCCTGGA
GACAGCCTGA GGTGAGAGCC CAGCCCCACT CCTGGCTGTG TGATCTTGAG CAGGGCTGTT AACTTCACTA GGACTTGGTT
TCGGTTTCTC ATAGAGAATA GGTACAGTGT GAATTAATA TATATAGCTT GAATAAGTG CCCAGCTTGT GGGTAGCTGC
TGCCATCATC ATCACCATCA CCATCATCAC CATCACCATC ATCATCATCA TCATCATCAT CATCATCATC ATCATCATCA
TCTCAGGCAC AGGGGCTTTA AGGACAACAT GCCAGTTTA AGGANGAACA CAACTCTCTT CATTTATAGC GNCCTCCAT
CAGTGTAGT ACGCTT

SEQ ID NO:395: (Length of Sequence = 315 Nucleotides)

AGAGATCAAA TGTCTTAAAC ATTATGGAAT AGGAGTGTAT GACTGACTAA CATCCAGTAA TCATTAGGGA AAACAAACAT
GAGTGAGGNC AACTGAAATA ATTATGATAC AATTAAGGT GGTAGGTTAC AATTGTATAG TTCTTTAAAA TATGCATTAT
TCCACATGAT CAGAAATATA AAANGANTTA GACAGATACT GGTAGAGAGA CAATTAATTT AAATTTGTAA CATATTGCTT
GGNGCAAGCA TTCAAGTTGA GTGCTTAATG TGTATCGGTG ACTGCACTGT GCAAATAAAT TTGGGGTAG TAAGA

SEQ ID NO:396: (Length of Sequence = 409 Nucleotides)

CTCCAGTTCT CACGTTAGGG TGCTTTCTTC CCGGCAGAG TTTTTOGAGC TCATGAAGGT GGACTGCCTG GAAAGTACTC
TAGAAAAGTC ACTCCAAGCA AAGTTTCCTT CAAATCTCAA GGTCTCCATT CTCTTAGACT TCACGCGGGG CTCACGAGGC
CGGAAGAAGT CCGGCACAAT GCTGCTCCCA CTCTGCGGA GGTCCCGA GCAGGTCCGA GTCTCCCTCT TTCACAAGCC
GCACCTCCGT GGGCTGCTTC GGCTCTCAT CCTGAGCGC TTCAACGAGA CCATCGGCTT CCAGCACATT AAGGTGTACC
TCTTGGACAA CAGCGINATC TTGAGCGGTG CAAACCTGAG TGACTCTTAC TTTNACCAAC CGTCAGACCG NTACGTGTTC
CTGCAAGGA

SEQ ID NO:397: (Length of Sequence = 414 Nucleotides)

GTGACAAATG TTAAGAAATT GTGTGTCAAG CAAAATACTT TAGAGGCCAA TGGGCCACAT GTTTTTAATA TCAAGAGATT
 ACACACAAA TTINTTTTCT AGCTTCTTTT GAAAATCAG AATTGGGAAG ATGTATTCAT GAGTGACTGC TGCCCCCTTT
 GGTGGGACT CGTTCCTTCA GGTTCATTAC ATGGTCATCA ATAACCATT CTTGGTCCC TGCTTTTGTC TTGCTGNC
 TCTAAGCATT TGAATTTTGA GTATTATAAG AAACTTAAT ACTTNTCTAT CAGTCACCAC ATACATGTGT TTCTATCTGT
 ACTACGCTT ATTAAAACN TTTATCAAT AGCCNCCATT TTGGAGGGG GATTTCAC TGGTGCCTNG ACTAGCAAGG
 AATT

SEQ ID NO:386: (Length of Sequence = 267 Nucleotides)

GTCTGTGGA CATTTAAGTG GTATCTTAG AGCAACACA GAGTGGTGC ATAAGCTGCA GTGTTTGTAGT ATGGTGGGA
 CTGTGGCATG GCGTAGAGGA GTACAGTCG CAACTGATG GCCAGCTCT GACCTCCAG GCAAGTGGAC TCAGAGGAGT
 ACCAGCAGAT CTTCCACAT GCGTCGGGA GGGCTCTGGG GAGAGTCAGT GGCAGGAGA GGTTCAGCTG TCAGGCTCC
 AGGGCCAGC CCGTGCTTT CCGCTCT

SEQ ID NO:387: (Length of Sequence = 384 Nucleotides)

ATTTAAATG ACATTTTATT TAGGCCAGG GACCAGTAA CATTATTTT AGGAGGAGAG CAAAAGGTGT TATATTACTG
 CTTCTAATTA CCTAGAAGGA AAGCATTTGC TACACTGCCA TTATGATTGG CTGCAGCAGT TCAACCTGGC TCTCGGAATC
 TGCCATTAGC TTGACAGCAT ACAGAGCACC ATATCAGGGT TACTATGGGA AGACTCTATT GTGGCATCAG AAACACAAAA
 AACACTGGAT ACAGTTAGTT TCTGTTGACA GTTCAGAAG AAAATCCAC AGATTGGACA GGCTGCCTGC TGAAAGGGTT
 GTCACTACAC ACAGCATGCC CTGAACCTG GGAATGAAGT TACCCCTATC TGTGGTGATC AGGA

SEQ ID NO:388: (Length of Sequence = 345 Nucleotides)

CTAAGATCAA ATGCAGGCAA AAGTGGTGAA TTTTACCACC TGTGTGTAAG TCTGGGTTTA TAACCTTACC GTAAATCACC
 TAGAACACAG GCTAGCCGAA TCGGGGTGTC TGGTATGGCA ATATCCGAG AGCTAACCTG GGGCTGGGC AATGTTCTGT
 GGCTGCTGCA CTTGCCCTTA ACAGGCCAGT TTAACACGTC CAGCTCTCAG GGCCACATTC TCCAGGACAC AGCAGGGAGC
 TCACAGTAGC TCAAGACCCG GCCCAGCTC CATCCCCAGC CTTGGAGCTG TCAGTGCTCC CAAAGGCTGA AAGAATTGG
 TCTTGGCTGA GTGGACAGCC CCGTT

SEQ ID NO:389: (Length of Sequence = 156 Nucleotides)

TAACTGCCC CAGCAGTGA TGCAGGAAGA CTTCTGGTG CATGAGGTGA CCAATCTGCC GGTGACAGAA GNACTGATTG
 AGCGGGAGAA TGCAGCCAG CTCAAGAAGT GCGGGGAAC GCGGGGGNG CTGCAGTATC GGCCCTCAG GGGACT

SEQ ID NO:390: (Length of Sequence = 364 Nucleotides)

GAGTCTCGCT CTGTACCCA GGCTGGAGTG CAATGGCATG ATCTCGGCTC ACTGCAACCT CCGCTCCCG GGTTCAGTG
 ATTCTCTGC CTCAGCTCC CGAGTAGCTG AGATTACAGG CAGTGCCAC CAGCCTGGC TAATTTTGA TTTTCAGTAG
 AGATGAGGTT TTGCCATGTT GGCCAGGCTG GGCTCAAACT CTTGACCTCA GATGACCCG CTGCCTCAGC CTCCAAAGT
 TCTGGGATTA CAGGCATGAG CCACTGCACC CAGCCCAACA CTGGGATTCT TTTATCCGCT GGCTGGCTCT TCCGAGTTG
 AATGTGTGA CTTCTTCCC TATCTGAGG CAGTTTTTC TTCA

SEQ ID NO:391: (Length of Sequence = 325 Nucleotides)

GAGTGTCCAG ATGATGGCAG TGATGGCCA TCTGGAGCG CTGCTGTAAG GACTCTGGCT GCAGCAGGG AGGCACAGCC
 AGGCTGCGC ACTAGGCAGA GCTGGTGTG GAGCCAGGAG CAGATGAGAG CCGGCTTC TACCAAGTTG GCAGTGAGA
 AGGCCGACT CCGGGTGTG GATGCGAGT TCAGTCCAG ACCCTGGCAT CCTGGGCTN TCAGGGGCC AGGAAGCCCC

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GATCAAAAAT TTTGGGGGTG ACCCTGGGCA ATATGGGCTT TAATAAGNCC CTAGGATGGG TTCTGATGCA TGCTCCAAAT
TTGNGGATCA TTGTVNCINT G

SEQ ID NO:380: (Length of Sequence = 311 Nucleotides)

ATTTTINAGAT GGAGTCTCAC TCTGTGCCCC AGGCTGGAGT GCAGTGCCAT GATCTGGCT CACTGCAACC TCCACCTCCC
AGGTTCAAGC AATCCTTCTG CCTCAGCTTC CCCAGTAGCT GGGATTACAG GCACCTGGCT AATTTTTTTT TTTTTTTTTT
TTTTGAGATG AAGTCTTGCT CAGTGGCCAG GNTGGAGTGC AGTGGTGTGA TCCTGACTCA CTGCAGCCTC TGCCCTTCGT
GTTCAAGOGA TCCTCCTGCC TCAGCCTCCT GAGTAGCTGG GACTACAGGC ATGCACTACC AACTTAGCT A

SEQ ID NO:381: (Length of Sequence = 442 Nucleotides)

AATCTGTGAA CATATATTTT NATTTATCTT AAATACCTAA GAGTGAAATT NTGGTTCAT ATGTGGGTAT ATATTCAACT
TTGTAAGAAT CTACCAAAAT GATTTTCCAA GTATATGTAT AATGTTATGG TCATCAGANC TACATGATAG TTAGAGTTGG
TTACATACT CACTGCAATG GATGACTTTT CCTGTGATTC AGCTATCCCA CTCITAGGCG TATACCCAAG AGAAACTCAT
AATGTCCITG TGTGCAGCTT GTATGCTAAT GATTTTAGTA GTATTTTTTG TAATAGCCAN AAGGTGGAAA CANTGAAAC
TTTCACGGA ATGATTAAATG AATTAACAAA ATATTATATA TCTATATATG ATCCATTAAT CAATGAAANG GANTGAAGTG
GTATACAGA AACACCACAG GTTAACCNIT GAAAGTATAT TA

SEQ ID NO:382: (Length of Sequence = 337 Nucleotides)

AACAGACTTT GGAGCCANTC CCATGTGAGT TTGAGTCTCA GAGTACTCT GGGCAAGTNA CTTAGGCTTT CTGAGACTCA
CTTCTCTCCT TTATAAATCA GGAAGAATAA TCCATTGCTC ATTGAGTTGT TAATNAGACA TAAATGAGAT AGTGTATCTA
AAATGTGATT TGTAAAGTCT AATACGNAAT AGATGCCTAT TTGAGTGTTC CTNATACTCA GGATGGTTCT TGGGATATAT
TTNCCCATGG AACAAAAAGC AGACTACTCA TGACCACTCG GATTTTATGT TCAGCCACAT TAGGGCTCTT ATGSCCTGAC
CTGAAGACCT ACCATT

SEQ ID NO:383: (Length of Sequence = 421 Nucleotides)

GTGAACTGA AGAAGACCAC GACAAACGAT CGCTCAGCCC CTCGCTTTTC TTAGGTTTAC AAGAAATGCG CCGGTGGGGA
ATGAACINTT TCATTAAATA AACCTAATTT GTCTTGATCC ATTCCACTCT ATAATAAAC AAAAGATTTT NTAGGCAACT
CGGAATATAG CTCITTTGAA AGTACTGAC ACCITTAGAT AAGAATTAAA ACCAACCTAT GTAACGACA TAATCTTGAT
CINTTAATTT GTAAATATTG ACANTTINCT TTCTGCACAT TTTAATCTTA GTTCCCTTT TGATTTINCT GAAGGTGCCA
AATTCATTT AACTNCITTA CAAGTCTTTG TAAAATTTTA AATGCATAAA GGGGGTGTGG GGGCAGGGG ACCNCGGANG
TAGTTTAAIT TTCGGAAAGG G

SEQ ID NO:384: (Length of Sequence = 420 Nucleotides)

GGACTCCGTT CCCAAGAATA AGTTTTGCTT GGGCGGAAAG TATGTGGTTC ATCCGAAAAA AAAGAAATCA ATGATTGTG
GCAGTCTTC ATGTGCTTTT GGCATTINC ATATCTTCCT TGGAGAAATA TCAATTAAGA TCCATTGCCG TATATACATA
TATTAAATTT ATGGGTCATG TATTATGGCT CATACCTGTA ATCCCAATGC TTTTGGATGT TGAGGCGGGA GNTCACCTG
AGGTTAGGAG TTCGAGACCA GCTGACCAA CGTGGTGAAC CCTGTCTCTA CTAAAAATAC AAAAGTTAGC CAGGCATGGT
GGCATGCACC TGTAGTCCCA GCTACCCAGG AGGCTGAGAC AGGAGGAATT GCTTGAACCC ANGAGGCAGA GNTTCCAGT
GAGCTNAGGA TTGTGCCACT

SEQ ID NO:385: (Length of Sequence = 404 Nucleotides)

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CTTAGCCATA AAATGTTTGC CTAGAACAAT GCCCTGGAGT GTTCCCTG AGTTTTCTTC TGGTAG

SEQ ID NO:374: (Length of Sequence = 278 Nucleotides)

GGGTTTTGGT TGAGGTTTCT ACCTCATAT CCAAGATATT TNCITTCAG CCAGCAGAAA GAAAAAGGAG AAGAGCTGCC
ACCCTTTGTA TCCAGGATGA TCTCTTNTG AAATCCTTGA TTTAATTATA TCTGCATGAC CCTTINCCCA ACTAAGGTTA
TATCCACAGT TACOGGGGGT TAGCACTGGG ACATCCCTTA TTTTANGAAC ATGTCTCAGA AAGTTGCACA AAAAATTCT
ACTACATCCC ATTGGCCAAT ACTTCTTACA TGATGACA

SEQ ID NO:375: (Length of Sequence = 321 Nucleotides)

GGTGACAGTA TTTTTGTGG TTTCTGTAGC TCCAGCCCCT CAGAAGGGAC GCCTACAGTT GGCAGCTATG GCTGTACCCC
TCAGTCATTG CCCAAGTTC AGCATCCTC CCATGAAGTG CTCAAGGAAA ATGGCTTCAC ACAACACGTC TACCATAAGT
ATCGTAGGCG CTGCCTTAAT GGTAAAGAAGT GTGGGGGGCA GGAGATGAGC CTCTGGGGCC GTTATTTAGA CCCAGAGTAT
AAGAGTTGGG GGATACGGG ATAGGTGACT CTTTCTCTG ACTTCAGAGC AAAAAAAGA CATGACATTA TAGCAAGAAA
G

SEQ ID NO:376: (Length of Sequence = 337 Nucleotides)

GGAAATTTA CAGCATGACT ACATATGTTA GGAAAAAAT ATCTAAAATC AATTAACATA GCCTCCATCT TAGGAACTA
AAAAAGAAG AGCAAATTAA ATCCAAAGTA AGAAGAAGAA AATAAATAAT AAAAATTAGA GCAGAGAGAA ATGAAATTAT
GAACAGGAAA TCAATTTTAA AAATAAATGA AACCAAAAGC TGGTCTTTG AATCAATTAA TAAATTTGAT AAGCCTCTAG
CCAGACTAAG AAAAAAGAGG TAGGGCACA ATTACTAATA TCATAAGTCA AAGAGGGGAC ACCCCTACAG ATCCCATGGA
TATTAAGG ATAATAA

SEQ ID NO:377: (Length of Sequence = 455 Nucleotides)

GTTACAATTG AGAAACATA TTTAATAAAT CATTGTCAAT TTINATAATG TTTCAAGCCC ATTCCTTGTT GATAGCCTCC
ACATTTATAT GGTAAAGTCA TTGTGCTGT GTTCTTACC TATGACATTA TTTINATATC CCTTCATTG TGGATCTTAA
GATGTTGCAG AAGGTTCAAT CCTGTACCCC AATACAGATT CACTTCCTTT AGCTGCCTTT NCTAGCACCA ATATGCTTTA
AAAAAAATG CGCAAACAAC AAGCAGTGAC AGCGGCCAAT TCCTCGAATG TCCAGATTAA TAACTGTAGC ATGCTAAAGA
AAGGTGTGTG TAAATAGCTG GAGATGGTAT ATGGTCCAGA GTCCAGCATA AAATTATTTT CTTCTGAGG CATTCCTCC
ATTCCCCTAA CCCGGATACA TGCATTAGGA ATGTAGCAAA ACCCTTCGGG GAACC

SEQ ID NO:378: (Length of Sequence = 349 Nucleotides)

GATGGTCAAG GGTTTATT ACTGGACATG CTCTATGCTT ACTTGCTTGA AAACGCTCCA TTAGAAAATN AACTCTGAAA
ACTATATGCC CAATGCTAAT AGTGGGTATT TATTGGTAACT ACTCTTTATC AGGIGCTATG ATTGTGTATG GCTTTATTIN
CTNCTTCATA TTINCTATAA TTINCTACAAT GAACATGTAT GTATAATCAG ACAAAAAAGC CAAGAAATAT CCATAAGTTT
TNCITGTCAT TCATTATCC CATAAATACT TGCTGAGCAC CTGCTGTAAG CCAGGCTCCG AGCGGCTGC TGGGTGGAGT
GCCGCACCCC AGGGAACGGT CAGCCCTCG

SEQ ID NO:379: (Length of Sequence = 421 Nucleotides)

ATTTTGAATC ATATTTTACT TATAGGTTTG CTGTATATAC TGATTAAACT TCTGAACCTA AAGATTCTCT ATAATTAAAC
TAGCACAAAT ATAATCTGTC CCTTACCCAC ATTGTAAGAA TGTCTGGTGG GGGAAATCCA ATATTGACCT TCACATTCCA
CATGGAAAAT CTTTGTCCCC AGAGTGCAAT TAGGGTGATT AAAAATAAGC AGCTTTTGTG AGTCTCAAGT TTGTCCCCA
ACAAGCAGC ATCAGCAACT GGAAATTTGT CAGACATGCA AATTATCCAG TCCACCTGA GACTTCAGCC CAGATCTATG

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AGAAGNCCTCT NGGAAGTGT GCTGTTTACC CTTTAGCAAA GNGNTACAAG AGCTATTAGT TGTAAATAA C

SEQ ID NO:368: (Length of Sequence = 370 Nucleotides)

ATTTCCCTTC TGCACTCGGT TCTCTGCTC CCCATTTACA TGGTTTACTT CATTTTCTC TTCATCCATT GGATTACAT
GTGTTCTAGG CCAATATTCC AGNGTGCTT GGAGTAAAAG TCTCTTAA TTCAATTTTG GNTCTGACCC ATCAGGGCTG
CTGAAACCAG CATCTTTTGC AGAAACCCAG GCAGCAAAAC AATCACTTTC ATCCAAAGTA ATAGTTAACA TCCCTGTTT
TAAGTCTACT GAGAACCAAT TTGGCACATA CACCATTTTA AATCTTINCT TAATTTTCATC TTCAAAATCC ACTTTGCCA
GATCTTCAAC TTTACATGGC TTCAATACAT CCAATATGN CACATTATTA

SEQ ID NO:369: (Length of Sequence = 315 Nucleotides)

GACAGGTATT CTTTGAAGT TTTTGTITA CTTATGTTTT NCTCTTTTAC ATCTCCTTGT GAATTTCTGT CCCATTTTGA
AGTCTCTCCT TGTTCTGAC CAAGATCCCC TTGATGTTCT GTAGCCAAAG ACTGAGAAAA AGAGTTATTC TGAATGATGT
AGAGGTGAT AAGTCTGGTA AGAACTGTT GGACATACTC CAAGCAGCAC TGCAITGCAG TCTTTTGGGC TGTCTTCCIA
CTTGGGFTG CTGTCCCTG AGTGACTACG GAAGGGGTCT GGATGATGGT TTCTTCAGAT CCCACAGTGG ATGCT

SEQ ID NO:370: (Length of Sequence = 442 Nucleotides)

AACACTTTTA CACTGCTGGC CTAATTTGTA GATATCTCA AGAAGATTAT GAGTCATTCT CACTACCGGA ATCTGTTCT
CTATTTTNT TACCAATGGG TGCACCATG AATGTTGGCC ATCAAATAGC AAATACCCCTC TGCTGTATT TCTACTININ
GTTTTAACTG GAGCCTCAGC TGAAAAGGTT TATGGTGCTG CTATTCAGTT TTATGAACCA TACTCTGAGG AGAATCTCAC
AGAAAAGCAG AGACTTCTTT TGGGTTTAAC ATCAGCAGAT GGAAGTCTG ATAGTTCCAA AACAATTCAT ACTAACAAT
GCATCTGCT TCTTTCTCAC TGGGCTTTTT TTGATGGCA TTCAGGAAGT TTCTGACTTT TNCGTATCG TTAATCCAT
CTCTGGGGCT CATGCTCTC CAATTGAGGA GGATAATTCC CA

SEQ ID NO:371: (Length of Sequence = 441 Nucleotides)

GACAAAGTCA CTCAGGCTCT ATTTACCAT ACCCCAAAGT AAAGGCCCAA ACTCCACCGG GGCCAAGTNT TTCTGGNTCA
AAGTCACCAT GTCCCCAAGA GAAGTCTAAA GACTCACTAG TTCAAAGTTG CCCTGGNTCC CTCTCTCTCT GTGCAGGAGT
AAAATCTAGC ACACCACCAG GCGAGAGCTA TTTTGGTGTC TCATCTCTGC AACTGAAAGG ACAATCTCAA ACTTCACCAG
ACCACAGATC TGATACTTCA AGTCCAGAAG TGAGACAGAG TCATTAGAA TCACCATCTC TGCAGAGCAA ATCTCAAACA
TCACCTAAGG GAGGTGGTTC CAGGCTTCA TCTCAGTCA CTTAGCTTGG CATCCAGATC TCCANTAAGG NCAAGATAGA
GGTGAGTTCT CAGCGAGTCC TATGTTGAAA TCTTGGAATT T

SEQ ID NO:372: (Length of Sequence = 362 Nucleotides)

GAGGTATTGT TGTTACTGGG AGGTGAAGG GAACACAAAT TCAGTTATAA GTCCTTTTTG AATACTAAGA GGGGAATAAT
TAGGGAAGCT AAGAGGGGAA TAATTAGGAG AAGAAAAAA AACTTCAAAC AATTTTCCCT GTACATGAT TTTACTTGCA
TTTATAAACT GATTTTTTTT TCTAAGCACT CCTTTGATAA TGATTAAGTG TGGGGTTACA TTATTINAGG GTCGTCTAAT
ATTTAAGGTG ACTTAAAAAC CTCACACAG TTAATCCGA ACTGTGAAAA TTTCTCATCT TATCATCCCT CTGTTACTAT
CAATTTTCCCT CACGGTACAG ATTCTTTTAT AATTACTTCA TT

SEQ ID NO:373: (Length of Sequence = 306 Nucleotides)

ATTCTTTTGG CGTGTGTGTG TGTGTGTGTG TGTGTGTGTG TGTGTTTTCG TGTGGAGTTG AGTTTCTTTG TAAATTCTGG
ATATTAGTTT CTGTTAGAT GAATAGTTG TGAATATGTT CTCCCATTC AAGAGTTGCC TCTTCATTCT GTTGATTGTT
TCCNTTGATG TGCAAAAAC TTINACTTAA ATATAGTTCT ATTGTTTAA TTCTGTTTTT CTACCCATG CTCTGAGAT

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ATGCTGGAAG TGATTTCGTC AGCTCAGGAT TTTTTTTTAA AGCTACATTG AAAATATAGG TTTATTTTTT GINCAGGTTT
 TNCTTTTATA TTTTTTINCT GCACAAAGGA GGAGGATTTT CCACTTACTC ATATCGAGGC CAGATTTTTTA AAGCCAGCTA
 AGGCAGCATC AGCTGTGCGG GATTTAAAGC CTATAGCTCA GCTGAAAAAA AAGGTGGGGT GGCGTTTCAT GTAATGGGAC
 ACGATGCCCT TCTTGCTGAA CCACTGGAAA GAGCACAAGG AGCACATTTT CTTCTCCACT GCCCGCCGGA GTTCTCGCT
 CAGCTGAGGG GAGTCGTCTT TGGGCGGGGA TGGGATGATC ACTTTGTTGG GCTTNTCGCT GATGGTCTG GAGGCTGCCA
 AGAAGTTGAG GTGTAATACG CATCAATGTC CGTGGCG

SEQ ID NO:363: (Length of Sequence = 449 Nucleotides)

TGATTTGAAG TAAGCTTTCC ATGCTTCACT TAGGGTGGGA AATTTTAAAT ATCAGAGCTT TCTTTGTTAG CAGCATATAG
 TTATGCAATT TATTTAAATC TGCAGTGCCA ATCTTTTTTT GATGGGTGTG CTTAGACCAC ACATTTAAGA TAATTATTAA
 TATGTTAGAA CCGAATATAT TTINATGATT AGTTTTTATG TGTCAATTG ACTGAATTAA GAGATGCCA GACAGGTGGT
 TAAACATTA TINCIGGGTA TGTTTGAG GATGTTTCCA GAAAAGGCTA GCATTTGANT CAGCAGACTG AGTAAAGAAG
 ATAAAGATAA TACTTGTGAT GTGTACAGGC ATCATCCAAT CTGCTCAGGA CCCCAATAGA ACAAAAAGGT GGAGGGAGAG
 TGAATTATGT CTACCCCTT GAGCTTGGGA CAGCCATCTT TTCATGCC

SEQ ID NO:364: (Length of Sequence = 282 Nucleotides)

GACTGTGTAA ATACACTTTA TTTTCCATTT TNCOCGCTG GCGACATGT GAACAGGCAG TGTGCAAAAT GGTGGCGGGC
 AGTGTAGGGG GCGTGTGGAG AGCCCCGTGG GTGNCITGCC CCGTCCCAG GCTTCGTAACT ACTGAAAAGT GGGCAGCTAG
 GAAGCGGGGA CGGAGCAGGG GTCCCCACCC AGGAAGCGCC AGGNAGATTN CTTGTAACGC TACTCTACTG GAGGCTCCGG
 GAGCACCGAG NGGGGCAGTC CCCAGGTCA TGAGGCCCGG GG

SEQ ID NO:365: (Length of Sequence = 349 Nucleotides)

TTCAAGCATT TCTCCTGCT CAGCCTCCCA AGTAGCTGGG ATTTTCAGCAC CTGCCACCAC GCCCAGCTGA TTTTGTATT
 TTNAGTCAAG ATGAGATTTT TGCCATGTTG GCCGGGCTGG TCTTGAATC CTGACCTCAA ATGATCCGCC TGCTCAGCC
 TCCTAAAGTG CTGGGATTAT AGGCATGAGC CACCACANCT GNCITTTTIN TTCIGTTTCT AACTGTTCCC TTTTATTTCC
 CTATGGAGCA TCTACTGAGC CCCAGCGAG AGTAGAAACA AACCTGCTGG CTGCTCTNAA GGCACCTATA GTCCAGTTA
 GGGGNGACG GGTCACTTAA CCACTTAGT

SEQ ID NO:366: (Length of Sequence = 366 Nucleotides)

ATGCAAAGGA ACAATGGTGT TGGCAAAGTC TTCTTTGAAT ATCAGAGACT GAGTCAATAA AAAAAATAGT AGAAAGGTGG
 CTTTTACTAT TGACAAAAGC CGGGGTCAAA AAAAGTAGTT TAAGTCTTAA GNCTGAATAT GCATTAAAGT ATGCAGGTAG
 CAAAGATGTA ATAAATTTCC TTAAAAAAG AAATTAAAGT TTTATTTAGA ATCAATTTTA CNGTCATTG TAATTGACCC
 NCTGAGNAT TACAATAAGC AAGAGGAAAT TAAGGTGTTT TGCAAGAGCT GTATTTATAT TACNGNTTTT TAAAAACCAT
 TTTCTGAATT ATCGTAATTA AAGCTCTCCC AACTCGTTTA AGTCAG

SEQ ID NO:367: (Length of Sequence = 391 Nucleotides)

GCAAAAACAA ACAACAACAC CTTAAGTAC AGTAGTTCCA AAACACACTG CTAAAGTTAT GAAATAATTG TGGATCATTT
 CAAGTAAAAA TTATTAAAGG AGCAATAATT AACCACAAGG GGGCATATAT ATATATNCNC CTTAGATTCC AGCAGAAAGA
 CTAGTTTTAA GTAGTAACAT GCACGTTGAA GTATTCTACA TTTTCAGTCA CTTAAACTTT CCTCTCTCAG ATGGCTACAA
 CTTTTTAATA TTCGAGGINT ATTTTATATC TAAGTAAAG GATTCCAGAA TACTCCTGCC CTGCAAAACA GTAGTGTTTT

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GGAAATTAGG TTGGTTATTA ACATGTATAG ATGGAAGTGG GGTGAAAAAA AAAAGGAAAT GGGAAATGGAG TGGAAGGGTT
GGGTGGGAGA GACACTTCAC AGTATTCTTT TTGTTTGGAC TTGGGAAATG TTACTATTTC ATAACTTAA AAAAATGCAA
AAAAAAATA TCAAACTAG GTAGGAAGGA GAACAAAATG AAATATAACC AGAAAGGAAT AANCTAACA CATTTTGAGT
GAATCAGAAA GCCAAACCA AAAAGAGCTA ATTAAAGTCA CTTTAAACT TGGTGTAA CTACCTACAC TCAGTCTAAA
AACGGNAAT AAGGGTAAAG AAATAGTGA ACTCTAGTTA GTTGGGTCTT TTCTTTACAG CAGTATGGG ATGGCAACCT
G

SEQ ID NO:357: (Length of Sequence = 275 Nucleotides)

CAGACAGTGG ATAATAACA CCTCATTAGG AAACCGATCT CAGAATGANC TCTGGAGTAT GAAAAGATC ATTTCTTTT
GTNCTGTAA CCTAGCATTC CTCTAGGCT TCINCTCCTT TAATTGAACC ACAGCTTAGC TCATGTATTC TTTTATTAC
ACCTGCTCT CATGTCCATA AGATTGAGG AATTAGGAAA TNAGGCTGGT TTGAAGAGGG TAGAAAGCAA TAAAGGCAGN
AAAAATAAG NCTAAATCA GGGGAAGATG TATTT

SEQ ID NO:358: (Length of Sequence = 314 Nucleotides)

GTGAAGGAAG TATGAAACT GAGACTAATA TTATGAAGTC TTTTTTAAT TCTTTATCTT ATGCCCCATT TTTAACCCTT
TGGTGTTTGA AATGGAAAT AAATATNCTC TTGCGATAG ATAATATGTC AATAACCAA AGGTGGCCTT AACCAATAAT
TGGCCCAACT TTAATTTATT ACCCTAAGA TATATAAAT ANCTAATCTA AAATTAATG CAATTTTGCT ATGACTTAA
GTGTCAATAA TCCTGTATAA GNGATCCNTT TTATGCAGTC ACTTAGGCAT GAAGTTGGCA ATTCATCTAA ACTT

SEQ ID NO:359: (Length of Sequence = 372 Nucleotides)

CAAGAGAGAC ATAGCAGGCA TTGAAACAAT GGAAATGCC ACATAGCAGA AGGGAGTGAG GGGATCCAAA CTACAAGAGC
GACAAATCA ACTGTGGATC CAGAGACGAA AAAATGTCT GTAGTGCAA GGTAATCTGG TGAGATGAAA AAAAAGAAC
CATTTTGA AAAANGGAAT ATTAGAATA TTGAAGTAAA TATCATAAGT CATCTATTA CAAAGGCATT AACTCCTTCC
TATCAATAGA ATGTACCAGT TTAATAANTT TTAGTAGGAA TATATCTTTT ATTTTATTA CAGAAATCAN GGGACAAAGA
GGATTTGATC CATCCATACT TCCTACTCTT ATGGGGTTG TCAAAATGTA GG

SEQ ID NO:360: (Length of Sequence = 395 Nucleotides)

GCATTCCTTT GATACCCACC TAATAAGAC AATCTCTAAA ACCAAATAAT AGGCTATGAA ATGTATTGTG AGTNCCTTAT
TCATTCAAGA CAGAGCTTAC CTTTAAGTCT CCAGCTGAGA CAGTTGGTTT TATCTTCTG AAAGCAGTTT GGTCAGTGT
TTCAAGTAAA TCAAAAGATC GGTAATCAA TTCTTAGCG AATGGATTA GACACTCTCA TTCAAATGG CAGTTTATG
CTTACTCATT GTCTGAATA ANCTAATA CTTTATGCTA TCTTCTGCT CCATTATTTA TGTAACTACT GGGNCCTTAG
TATTCGTCTT TAGNCAATAT AAAATCACTT NCAGGTATTT TCCATCAOGG ACACAGAGGC AGGCACAAAT TAACC

SEQ ID NO:361: (Length of Sequence = 298 Nucleotides)

ATTTTTTGT GGGGAGAACA TTAAAGACCA TTCAATGTC ATGATGAAAG CTAATGGGAG AAGGCTTTIN TNCACAAA
ATTTCCTTA TTTTINCAAC TTTATTGAGG TTATAATTGA TATTAATAA CTGTACAGAT TTAATGTGTA CAGTCTAATG
AGTTGGGACA TATGCTTACA CCCNIGATGC TGTTACCACA GGCAAGGTAA TACACATATC CGTCACCTGC AAGAGTTTCT
GIGTTCCCN NIGTTTCTA TTTTNTTTT TTCAAAAT TACTTTATAG GGTATAG

SEQ ID NO:362: (Length of Sequence = 437 Nucleotides)

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SEQ ID NO:350: (Length of Sequence = 384 Nucleotides)

GATCTGTGCT AGCTGTGAGG CAGCTCTGGA ACGTGAAGAG CTGTTTGGTT TGANCCGTGA ACAAACCTGT GTTTTGAGTT
TAGCTGACAT TAAAGAAAAA AGTTCATCAC GTGACTGTTA ATGTAAACCT GGTTATTAAA ATAACATTTT AAAACAGGAG
AAATCTGGTA AGTTGTITAGG NITCTAAATT CCTTTTAGTC TGTTCACCTGA GATATTAAAT TTCAGTAGAC AGAACCCAAA
AAGAGATTTC ATTTCTTTCT AATCACTTTG GCTTCINTCT NTTTTNTTAA GTAGGTAAAA ACCTTCCTTG GTGGGCACCT
AAGCAGGATG CAGCCAATTA GTTCATGAAC CCAGCTGCGG ACGTGAAGGC TTAAATCTA AGGA

SEQ ID NO:351: (Length of Sequence = 305 Nucleotides)

ATCCTGACCC TCCCCACTGC AAGCCAGGG AGCCCCAGCC CAAGATGGCC AGCCTGAAAC TGTGGCCAG GGCTCCTCTT
GTGGCCATGT ACCCAGGGCT GGCTGGCCTG CCATTTGCCT CTCCCCGGAG ACAGCCGTC TTCTGCAACC ACACCCCGTG
CCTAGCCACA ACCCCAGGCT GCAGCTGCTC AGAAGCTCCA GGCATTTTGT TTCTGGTGAC CGCCCCTAAT GGGATATCGG
TGATCACTGG TCCACCCCTC CTGTCAGGGC TTTTCTGGGG GCTGCTCTTG GAAATGAAGT CTAA

SEQ ID NO:352: (Length of Sequence = 270 Nucleotides)

GAAATTACCC ATGGTCATAT CTAGCCTACA AAGAAGAGAA AATACAGTGA TTCAAGTTTC ATTGTATTCC TCTCATTGAT
ATATTTATCA ACCTTCCAAT TGAAGGAAGT GTCTTCTAGG CCTTTACAAA GAATGTAACC AGGGTTTAGG TATACAAGTT
GCATATGATA AATCTGTCAT GTTCTATAT AAATCTGTCC ATATTCCTCT TCTGAAATGC ATTATTTTTG GGGGAAATTA
AAATGTGATG CAAAGATCCT TATACTTTGT

SEQ ID NO:353: (Length of Sequence = 195 Nucleotides)

GTGTGATTCC ATTTATATGA AATGNCCAGA ACAGGGAAAA CCTATTTNAG ACAACAGAGA CACAAAGTCG ATCAGCAGTT
GCCAGGGGAG GAGGAAGACG GGAGGGGAAA TNATTGCTTC ACGGGGTGAT GACAGAATGT NCCAGAACGT GACAGAGGTG
GTGCCTACAC AACTTTNTGG NTGTAATAA TGCCG

SEQ ID NO:354: (Length of Sequence = 388 Nucleotides)

GCCAAATTTT TTATTTTGT AGAGATGGAG TCTCCCAATG TTGCCCAGGC TGGTCTTAAA CTCCTAGGCT CAAGGGATCC
TCCCAGCTGG GCTCCCAAA GTGCTGGGAT GATAGGCATG AACCACCAAT CCCAGCCCAT TTCTTTTTC CCTTTGCACA
GTACCAGATA TATGGTGGT ACTGCAGAAA TAATTTCCCC CTGCCCTCTA CATTGATCAT TTGATGACCA AATAGTGTCC
GTCTAGCCAC TTATTTATGA TTTGTACAAA ACATTCCGCT TTCTGAGGTA GACAGTGATA TTCTGAAGCC ATCAGTAAGA
GTAATTTTTC AGTNTTGTG AAAGTGGNCA TTCTTTGTGT AAAGGTCAGC CTGTCAAGGA AATAGCAT

SEQ ID NO:355: (Length of Sequence = 288 Nucleotides)

TAAAGTGAAG TATTGGGAAA GGAACATCT CACTCTGATA GATTTGAATT TNCTATTTCT GCTCTGTGAC AAAACCCTGA
GTTGATATGT GATCAGACAT TTACAAGGCC CTGCATTTCTA CCTGGNAATG GCTATAGTGG TGTGTAGCTG CTGTGAGATG
ATTTACTGCA ATTTGTCACT TTTTGAAACT GTTCCAAAAT AGTCTGTCTGA CAGCCCTTCC CCTCATGAAA ACATCTCTCC
TTTTCCAGTT AAAAAACAG TCAAAAACA CCAAAAAGG CCACCTCC

SEQ ID NO:356: (Length of Sequence = 401 Nucleotides)

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TGCTCCAGGA AATTGGAGTT CNAGCTGAAG GCCTTGCGNC ACTCCGNGCA CTCTAGGGC TTCTNGCCCG TMTGGTGGC
 TOGGTGCTGC ACCAGCGTGG TGCTTCGNCC GAAGACTTGC CGCAGTCCGG GCAGCGGAAG GGCTTCAGGC CGCTGTGTGT
 CTCCTGGTGG TGGATGAGCT GCGAGTNGC GCGGAAGGCC TTNCCGCACT NCCTGCAAGC GTAGGGCTT

SEQ ID NO:344: (Length of Sequence = 227 Nucleotides)

TCCGAGATC ANATTACCC TTGCCAGAGG TCAGGSCCCC CGGCCTTGGC GGCGGGCCAG AAGCGTGAAT TGGCCTSCITG
 GAATGCATGC CCCTAAACAT CTCTAGACTA GGGGCAGTKT CCGCCAACCA TGGAGGCCCT CCATCAACAT CCCTGCAGCA
 TCACCACNT CCAACCCCCA TGTCACCC TGGNGNTTCC ATACCTGTAG TAAGAGAGCA AACCATT

SEQ ID NO:345: (Length of Sequence = 249 Nucleotides)

GGGCAATGTT GTCACAGATG TGTGCAGATT TTSCAGAGGA CATAAGTTGG CTGTGAGGWA GAACACAGAG GTTSCCTATT
 TTTTAGGCAG GAAAGAAAGC CTGCACTTTT CTGTGTGTGT GTNTCAATAA ATCTGAATAA CACCTTGAAA GGGTTAAAAA
 GCTGAGCACC AGGTGTTTTT TTCCACTTT CCAGAGTAAT TTAAGCACAC NSCAAAGTTA TCTCCCTTCC TCCCCACGA
 GCCAGCTTA

SEQ ID NO:346: (Length of Sequence = 356 Nucleotides)

ACCTAGTCCC GCAGCGCTG CAGCCGCTGG GTTGGGGAA GAGCTGGACG CCGAGCTAGA GGAAGAGGCA GAGCTGGACA
 CAGTGGCGGC GTGAATGGC CACINCTTTC GGAGCCOGAN CTCTCCCGCA CTGGAGAGGA CTCTTCTTGG GCTGGGGCGC
 TCTTGGTTCC GCTCCCGCTC TGCTGCTGCT GCGGCGATTT NGCGCGCGG TTCTTGAACC AGACCTGCAG TGGGCGGGAT
 GGGGAGAGT GGGTCAAAGG GAGCTAGGGG AGCTTNTTGC TCCACCGNCC CGTGGACCCA ACTCCCGGTC CAGAATATCG
 CAATCCTTTC TCACCGAGGC CTTCGACCTT TCTGT

SEQ ID NO:347: (Length of Sequence = 155 Nucleotides)

GCGCGGTGC GTCCGATGCC CAGCTCGGT CCAGACCGCG GGGATGCAGA CCGGTTTACG TCAGGCTTGA GGGCTGCTCC
 GCATAGACCA ACGTCCGGG AAGGCACACA GTGGCCGAGG GCGCGCGC TTKGGCTACG GCTGTATG TATCT

SEQ ID NO:348: (Length of Sequence = 362 Nucleotides)

AATTCGATT TAACTGATTG TCTATTCTG CTCATACATT TCAAGTTTAA ATGCAAGCAT AAAATGTTTA TCAACAAATC
 TAGAGAGCAC TTGGATTIN AATTTTCTG TGATCACAGT AAGGAGCATA AAAAAGAGTA TCINCTGTTA CACAAGGCCT
 GINCTCTCTT TACATCTTCA GACTTAAATT CTGTAGAAGG TAACAGCTTT GTATTAGGA CAGAAGCTTA GTGGTCACAA
 ACAAAAATA ACACTGAAAT ACAATTCGGG NATTANTGAT ACTGTGTGTC TCAAAGGATA CCTGAACAT TACANINACT
 AATAATTTGG GCAATGAGAT TCCNGGTGN TTCAACTTTT TG

SEQ ID NO:349: (Length of Sequence = 342 Nucleotides)

AATTCCTTTT TTTTTTTTTT TTTTTTTTTT TTTTCAAGTAT CACAATGTTT ATTGATAGAT ACAAGTATAT
 AAAATCAGG CATGANCATG ACTTGATAAA TTAAGTAGAC TTAATTTCAA TACTATAATA GNGGGACCA ATTCAAATTC
 TCACCAATTG TTTCACCCC ACAAAAACCA CTTCAGGGC ATTAACGNTC TCTCAAACT GNTCAGTTTT GTGCAAGTAA
 ACCATGTTT TTTTAAAAG ACTTGTCAC TTGCCAGGC TCAAGGTTAT TAAAATCTAG GCACATAAAG NCCATTACTA
 GAGGTAGGAA ATACAGGCAA TT

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SEQ ID NO:337: (Length of Sequence = 279 Nucleotides)

CTTAGGGCT CCTCTGACT CCTTCCAACCT CCCAAGTCTG CAGCCCAGGT AAAGCCAGAG CAGACTNAAG GCAAGTTTTTC
AGGAAACCGAG GNGGCTTGAT CCAGACTCAC AATCTCCCTG CAAAAGTKTT CAGAACACAC CGCACAAACA CACACACGNC
TCACAAACT TCTGAATGTC GCTCTGTCTC CACCTTCTCC AGTCACCGAA AGACCTCGGC CTGAATTGGA GCCCGCAGCC
GTAGCTGTCC CINTCCACCT GINGCCCTCG CGGAGGCTT

SEQ ID NO:338: (Length of Sequence = 339 Nucleotides)

CCACNCGTGG AGGGAGGCCA AGGGGCAGCA AGAGAGAGGG AGGAAGCCCC ACTCTTTTAA AACAAACCAGA TCTCTGTTRA
ACTGAGAACT CCTTATCAC CAAGGGGACG GTGCTAGACC ATTCTAGAGG GWTCCGCTC CATGGGCCAA TCCCCTCCCA
CCAGGCCAC CTCCAACACT GGAAATAACC TCCCAGCAGG CCCGCTCCA GCACTGGAAA TAATGCTTCA GGTGAGACT
GGAAGGGGAC TGATGGAGCC TGGWTGTTK TCCCOCGCCA GSTCMAACG TGAACCGTAA TCCCAATGC TGGAGGGGG
GCCTGGTGGG AGGTGACTG

SEQ ID NO:339: (Length of Sequence = 334 Nucleotides)

GGCACGGGC TGTCCTNGT CCAGCTAGCC TCACAGGGAG TGGCTCTTAA AACNGGCCG CCCACNCCAT TTGGAAGCTG
TCCCGGGTTT TCCGTGAAGT CCTCCCGGC TGTTGTCTCC TGGATGGTCT GGACCAACAG CTTGGGGATG AGGGGAGGCT
CGGGGGCAAG GGCAGGAGCC CCAGCCAGGC GCTGGGGTIN TGGCTGATCG AAGAGCTGCA CCACCCNGTA GCTGGCCAGG
TGAGTATNGG CGTCCACCAG GTGCAGACAC ACATTCTTTT CCTTNACAGC CTCCTTACCC TGGAGTTTAT AGCCAAACGT
GAGTGCATC CAAT

SEQ ID NO:340: (Length of Sequence = 450 Nucleotides)

GGCCCCACAA TCCCTTCTG GCTCCGGGGA CGGGCGGGG GGGCGAGCG GCGGAAATA ATTTINIGTT TGGTGTCTC
TGCCCCAGTC CCTTGGCCG GGGACGGGA GACGGGAGAA GGTGCGGGA GCGGGAAGCA GGAGCGGGAG CGCGCGCCCC
TGGCAGCAT AGGGCGGCG AGAGGGCAG AGCAGGGAIT GAGCACCTAC TGINTGCCIT CACGCTTTAC AAAAGGATTT
TCGTTGATG TTCACTACAG CCCCTGCCCG GGGGTACTGA TGCCCCATTT ACAGAGGGAC AAGCCGGATT TCGGAGAGGT
GAAGTCACTC GCCGAAAGTC GCACCGCCAG GGTCTGCGTG ACACCTTAA GCAGTGTTC GTTACCCCGG GGAGAGCGCG
ATGAACCTGA ACCACTTGT GGTCTGGTTC CTGCTCTTGC TGTFTTTT

SEQ ID NO:341: (Length of Sequence = 192 Nucleotides)

TTCAAACCT GCGGCACGG CTGTCCCTC GAGGCCCGC CCTTCCCT TCCGGAGAGC CCACCGCTGG GTCCTAAAGC
CCACCGCTGG GTCCTAAAGC CGCCGGGTN TTTACCCAGG ACGGGCTGG GGAACCGG TCTTCTAG CTCTGGNTT
ACTTCTGGA GACTTCTTAA AACGAGAGGA GA

SEQ ID NO:342: (Length of Sequence = 229 Nucleotides)

GTGGTAACTT TTTTAAAAA CATAAATACC ATACAATICA TCCTTTTAA GTGTGTAATT CAGTGGTTTT TGGTATATTC
AGTGTGCAC AGTCATCACC ACTAATCCA GAATATTTT ATCACNCCA CGGCTGTATC TCCATTTCT CTCTCCCKG
CAGATCCTGG CAACCGCTGA TCTACTTCT GTCTCTTACA GACTTATCTG TTCTGGACAT TTCACATAA

SEQ ID NO:343: (Length of Sequence = 229 Nucleotides)

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TAAGGATTTT AAGGAGAGTC AAACCTCTACA TTCATCCAGG CAAACATCTA CTCCTCCATT GATTAAATGNN TCCACTCATC
 CGTGCAACAC ATTCACTCTT TCATCCATCC ATTCATCCAT CTATCCINCA TCAATCCATC CATGTATCTT TCATTATCC
 A

SEQ ID NO:331: (Length of Sequence = 322 Nucleotides)

CCCAACGTTG CCCCGCCTTT GTCTCCAGCG GACTGGAAAG AACCCACCAT TGTGAAGCAC AGAAAATTGC CGCACTCTT
 ATTGGCTAGG TTCCCGACT TCCGCTCTCG GTTGGTGGTT GGCTTTGCCT GTTACCTGIG TTGCCACTA CCACTGCTC
 CGCGAGCCC CAAGGATGGA TCGCTATCCC GTAGCCGGGT GTTCGGAGC GCTGCGGGCA AAGCAGACCG CCTTGCGCT
 ATTATGGGTT GAGTGGCTCT GTACTCTAGA TCGGCTCTGT CACTTACTAA TGGGCCGTGT TGCCCTCGCG ACTGCAGGTT
 TT

SEQ ID NO:332: (Length of Sequence = 441 Nucleotides)

GGCTCAAGNA ACCTGCATCT TTGCACTCTG GCCTTCTCCC AGGCTGAGCT TTATCATATC ATCAGCAGCA ACCTGGAGAA
 AATTGTCAAC CCAAAGGGTG AAGAAAAGCC ATCTATGTAC TGAACCGGG ACTAGAAGGA AAATAAATGA TCTATATGTT
 GTGTGGATTC CCTTCTGGCG TGTGTCTTC ATTCAAAAAG CATTTATTGA GTGGCACCTA TGTCCAGCCT GAAGATGAAT
 GTGTGGGAA GGGGTGGTG TCACAAAGAC AAAGATGACT TAGATGCCCA CTGTAATCTT GACTGTGAGA AAGAGGGGAT
 TCAGGCCCTT TCTCATCCAG TAGTCAATGT GCCATCTCCC CTTCCTAGT CACCTCTTAT CTTCACTTAC CTTCTTCTT
 CTCTGCTTA TCTGTTTTC ATCTAAGGCA AAAAGGGGG G

SEQ ID NO:333: (Length of Sequence = 354 Nucleotides)

AGAAGCGTAG ACCGAGTAGC TTGAGCGCCT CTTCGGTTA CCTTTCCCA GCGCCAGAG GCCTTAGGGT TGGGGTCTC
 GCTCAGGCAC AGAGNCCGA CACGAGCGG CGGCTTCCC GGGATCGAG GACGCGCAG CCAGAGGAGA CGAAAGGAAC
 CCGGTGCGA CCAGATCGGA ACCACTGACC ATTGCCCATG GCGGCCCTAG TGAGTNTGGA TTTNGCGGG TTCCGGGGT
 CCGACGGCA CCTCGGCGAC CCTCACTCA CGCTTCCC TTTNCNAGG GNCCTAGNAG CCAGAATGTC ACTGAATACG
 TNGTTCAGT TCCTAAGTAA GTCCCCAGGC CCAT

SEQ ID NO:334: (Length of Sequence = 196 Nucleotides)

CTCCGCTCC GCACCGCCT TTCCGAGCA GGCTACACCT CTCCCTGGCG CATCTTACT GGAAAGCCGG CAGNGNGNG
 GGAGAAGTGA GCNCCGTCTC CGCGCTCCT CGGTCTGCT GGCTGAGCG GGGGATGGCT CCGGAGGGAG ACACTCAGGA
 AACCACCTCC GCCCTTCCC CATCTTATC CAGCGG

SEQ ID NO:335: (Length of Sequence = 261 Nucleotides)

TCCGAGAGCT GTCTGGGGCC AACGTGCTGG CTGAGTACTA CTGGCTCANA CGCCGCTGC TGGGGGCCCC TGGNAATNTA
 AGTCTGCCC CGGCTGTGCG CGCCCTCTC CCTGANAGCC CCTGCNTCC TGGGCACAGG GAAGCTCCA TAGGCTAGTA
 GCATCACAGT GCCAGGCCCA GAGCTTACTG GACTTCCCAA GTTCTATGG GACTAGGGCT GAGGGTACAC ATCTGCTTT
 TTTCCAGAAT ATAAGTTTTG G

SEQ ID NO:336: (Length of Sequence = 191 Nucleotides)

CGGAAAAGCG CTTCCGCCAC ATCCAGCAGC AGTAGCAGCC GCAAGNCCG GGACTCGAAG GCCCACCNGA GNOGGACTAA
 GTCTCCAAG GAGCCGCTT CGGCTACAA GGAACGNC AAGGCTACC GGGAGGACAA GACCGAGCCT AAGGCCTACA
 GCGGGGGCG GTCCNTCAGC CCACTGGGAG G

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GCACCACCAC GACTGGCTAA TTTTAAATTT TTTNNTAGAG ACGGGGGTTT CCTATGTTG CCCAGGCTGG CTTGAATTCC
TGGGCTTCAA GTGATCCT

SEQ ID NO:325: (Length of Sequence = 461 Nucleotides)

ACTCCAGACT CCTCCAGCTG TCATGGATCC TGGGCCAGGG GATCCCGNAC TCACCCAAAG TGGGGCTTTG GGCGGTGGTG
GGCCGGTTCA GTGGTGGAGC GTCTTTTGT CCAGCTCAGA ACCTGCTGCC GGTCGGGTCC CAGAAAAGTT TCTAGCGGGT
GTAGTTGCCA AAATTAGGGT CTGTNACTGC TGGGCTGGCG GTGGGCGCCT CATCCAGCC TTGGAATCC TTGCCTAGTA
GCGGAAGTT CTAAACAGCA AAGGATACAA GGCCCTTGA GCGCAAGTAA ATTTCCCTC TTGCAGCAAC AGGTGTCTC
CAAACCAAGC AGCGTCCAGC TGTGTCGGT GGTGGAGTT CTGCAGTNGG GTGTGGGGAT TGGGAAGGTG CACAGGCAGC
CGCTTGAGAC CCAGAGGCAG TTTGGGGGAG AGGCCTTGGG CTCAGAGGCC TTTCTTTGTT T

SEQ ID NO:326: (Length of Sequence = 391 Nucleotides)

GGCCCTCCAG TGTCTGCAG AGAGGCACTC TTGCCAAGTG TCATTGATGA CGCAGCTGAA AACCAGAAAC ATTTCACTTT
CCAGCCACGA GACTGCAGCA ATCTGCTCTT TGGACTGCAC TTAGGGAAAC CGAGGCCAG ATAAGTACC CCTCAAAGC
CCCCAGGACG GCAAAATCAA AGGGGCTGAG GTGCTCTGAA CAGCCCCAGC AAATTAAACC ACCTAAGCTT GCGCTACTCC
CACTGCCCTG AAGCAGCCTG TGGTGGGAGG TGGGGGTGGA TACAGTGTTA CAAAGAGAAA CCTGAGTTGT AGCCATAGAT
TGCTAATCAG TAACAAAATA TCCCTCTAAA CCCAGTCTG CCTTGAACCC ACAGGCTCAG GATGGTAAAT A

SEQ ID NO:327: (Length of Sequence = 438 Nucleotides)

TACTGACTGA CCTGGT GATCCAGC CGAGACGTT CTGCTCCATT CCGGCAGGAG CTACCTTCCC GAGCCGCGCT
TTGCTCACCT GTAGGAGT TAGAGGGAAA TAAGACAGCC CTCTTAGGA TGGTGGAGTG GCTAGAAAGA AGCAATCCAC
GCCAAAGGCT TAGCTCAGTT CCTAGACTTA GTAAATGCTC AATAAATGTC TGCCATTGTT ATTATTTATT ATNATGCTTC
CAGCTGGCCT GGAAGGAGGG TTCTGGAGCC AGAAGGGACC TTGGAGAGAC CTCGGTTAAA TCTCTAGCGC CATCTTTATT
TTTAGGATGG AGTAACTTGC TCAGGACCTA CATCTAACAT TGTGGAGGGG ATGCGGTTTT TAAGTAGGAA TTCTTNGACT
AGACCTCTCA GCAACCCCTT CTNTCCGTC ACAGTGGG

SEQ ID NO:328: (Length of Sequence = 400 Nucleotides)

TTGCCCTCTC GGCCTAGAAG TCTCCATTA TGGTGTGTG TCTGCTGGA CCCACGGGC GCTGCACAGG GAACCATGTG
GCGTGAACC TCAAGTCCNG NCCAGCAGGG GTCAATTGTC TCAGNCCACC CCTCCCTACC CCCAGTATCC TCTCTCCTTT
ATAGATCATC CATTAAAGTGC CAGACACTGC AGAAGGCACA TTGACTAATA TTAAATATTA GCCCAGCTAC CCTGCTGGGC
TGTCTTCTT AGAAATGAGG AAGTGGAGGG TTAAGTGGAT TTCTCAAGGT CGTGCAGCTG GTAAATGGCA GAACCAAGAT
TTGAATCAG GTGTGCATGA CTTCAAAGGA AGACACCACT GAGGCCTCCT CTANTGGGTC TGCNTCCCTA CCGGCCCTGG

SEQ ID NO:329: (Length of Sequence = 227 Nucleotides)

GGCTGGGCTA AACTCCAGAC GCTGGCCACC TTCATAGGGT GGAGATGACA GAACAGGACA GGAGCCATGG GGCTCCCGGG
GCGGGTAGGG GTGGGTGATG TTCCTTGGCT TGGGGGCGT TACAAGGTA CAGTGGGGCT TGTGAAGGG CAAAAGTTCT
GTAAGTNGT CCCNACAGC CAAAGAAACC CCAGAGCCGT CTTTCGACTG ACTACAGCCT GGAAGAG

SEQ ID NO:330: (Length of Sequence = 401 Nucleotides)

TGAAAATATA TCCACTGTTC AGAGGGACAA CAAAGGCAGT TAGACTGTCC TGAACGGTCC TGCCTCAGGC TGAAATTTTT
GTAGCACTTG ATCAGTGC AAGTGATCTT CCTTTAATA TCTATTTTA TCATTGGGTA TCTGAAGAGG AAGTGAATT
GGGGTAAGAA TTTAGGTTCT TGCCATAGCA TTTGGGTGGC CAGGGTAAGC CTCAGGGTGG AGGACCCCTA AAGAAAACCT

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CAGTGGCCAT GCCCTGGCG ACCTCAGTGT CCCACTCTGT AAGGGGACAA TGCAAATCCC TTGCGCTCAT AGGGTGCATG
 TGCCAGTNTT GATAAAGTGC TGGCCACAGG CCTGCGCTTC CCAGGGCTCA CAACACTGTG TCCCTGACAC ACCCGTGGGC
 TGTAGTGATT CINTTCATGG GGTATTGACT ATAACCGCA GTGAGGAATG AATTTCACAN CATAGCTCAG TACATACACA
 CATATCT

SEQ ID NO:319: (Length of Sequence = 382 Nucleotides)

CACTGCACAC CTGCGGTGG GGACAGGACA TGAATAAGCA CAGAGCTTTC TTCTTTTGGAG GCCAGCATG TGGTGCAGAG
 CGGGACCAAC TGCAATCCACA CAGCCCGGCG CACTGCTCC TACTTCTGCT TAGCGTGTGA GCAGCTTGGT GAACAGGGTC
 TCCACCAGGG GGCAGGCCAG GACCGGCTTA CAGCACTTTC TAGGGGTCT CTGGTCCCGG GCTGGGACAC ATACAGGGCT
 TAGTAAAGTT CATAGATGGT AGCTAGGCAG CCGCAGGCC CAGGTGACAC CINTCCCTG CCTGNCCTGT ACTGNCCTGC
 TGCAGCACTC CTGGGAATCT TGTACGAAGA CAAGGAGAGA CAGGACTTCA TCTTCACCAT CT

SEQ ID NO:320: (Length of Sequence = 368 Nucleotides)

CATCGGGGC ATGGACAGCC CCGGGGTGN CGCCCGCNC CCCCCTGCC GGTGCGGTG CNGTTCACCA GGCAGCACT
 GGACAGCTCC AGAGTGGGG AAGCGCCATG GTTCTGCGC AGAAAGGATG CGGGTGGGG CCGGAGATC CTGCCAGGAC
 TAGGGGCTT CCTTTCCAT CAGGAGCTG CAAGAGAAC AAGAAAACAT TAGAGGGCT TCTGTGTAGG GGGAGGGCAA
 GTTGAAGTCTA TCTTCTCTT TGTAGTACT AATTAAACAC CTGCTGINTG CCGTGTACTN TGCAGGGTGG GACAGGCATC
 ATAGCAACTC ACAGTGGTCC CCTCTCTTT GTGCCATAG TCTAGTAG

SEQ ID NO:321: (Length of Sequence = 355 Nucleotides)

GGTGGACTGT GCTGTGAAC TGAGCTGAAC TGGATCAGG AGAAGGAGAA GTGGGATG AGCCCTCAC CTCCACACAC
 TCCTCTCTGT GCGTAAAT CTCCATTAA GCAGCATGC TGTCCCTGT AAACACCCAC ATTAAGCCAT TATCATCTT
 ATGGCTTAG TAGGCGTAG TCCCTCAGAT CCTTCTGC TGAAAGCGGA TCCTGATAGA GAGAAGGAA GAGAGATGGA
 TGGTCTGGG GACGCGAGG TGGTCCAAGA GTGGGAGGA AAGATGTCTC TCGACTCTN GGGNAGAAA TATTTCTGG
 GGAATATGG AGGCACCANA GGCAAGCTCA AGAGG

SEQ ID NO:322: (Length of Sequence = 225 Nucleotides)

CTCTCACTTC TCACCAGGCA CCCACAAAGC CCGCAGGAG CTCCATCTT CCAATCCANT CCCATTATCC CAATCTCTAC
 CCCAGGATCC CCCAACTCC TCCACTTCA CCTCTGCCAC AGACCGCTC GCGCCCAAC TTCAGCTTNC CCTCATCTGC
 CCTNACCACC CACAGCCCCCT CCTACCTAGC CCTCTCCGC GACGGGCGG CGGGCTCCCC ACATT

SEQ ID NO:323: (Length of Sequence = 250 Nucleotides)

CTCTCGCTCC TGTCCGTGAC CTTCAGATG CAGGTGACAG CCTGCCCTTC CGTTTNTTC TTTCAGTCC CGCTGCGCG
 ATTGGGTTC AGCCCTGCC ACACGCCCG TACATCCGC CTACACTCAC CGATGTGCC TAGCAACCG GCTGCGCGC
 AGCATCGCA ACGAGGTCC CCGGCTCCA GTTCTCTGN GGGAGGGAG AGGGGTGTG CTTCTCCAGC CCGCTGCAGC
 CTGGTGTCTT

SEQ ID NO:324: (Length of Sequence = 338 Nucleotides)

GINTTCTTAT GCGGATAAAA TTCTNAGGT AAGAAAAGTT AGCTCTGAGC AGCCCTCCG CTGATACTAA TACTTTACCA
 ATGGAGATTT TCCTTTCTT TTCTGTTTT GAGACAGGGT CTCACTTGT TTCCAGGCT GGAGTGCAGT GGTCACATCA
 TGGATCACTG CAGCTCCAT TTCCCTGGCT CAAGCCATCC TCCACCTCA GCCTCCGAG TAGCTGGGAC TACAAGGTGT

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TGCAATTGGA TACGGAGAAG GTCACAACAG GCACTGGTIT CCAGGAAGCG CCATTACCG TTTTIMATGG GYCAAAGGGA
GTTACATTGG CTATGGCTTT TGAAG

SEQ ID NO:311: (Length of Sequence = 489 Nucleotides)

TGACTCGGT CCTGGATGTG GTGAGGAAGG AGTCAGAGAG CTGTGACTGT TTCCAGGGCT TCCAGCTGAC CCACTCTCTG
GGGGGCGGCA CGGGGTCCGG GATGGGCACC CTGCTCATCA GCAAGATCCG GGAAGAGTAC CCAGACCGCA TCATGAACAC
CTTCAGCGTC ATGCCCTCAC CCAAGGTGTC AGACACGGTR GTGGAGCCCT ACAACGCCAC CCTMTGGTTC CACCAGCTGG
TGAAAAACAC AGATGAAACC TACTGCATTG ACAACGAGGC CCTGTATGAC ATCTGCTTCC GCACCCTGAA GCTGACCACC
CCCACCTACG GGGACCTCAA CCACCTGGTG TCGGCCACCA TGAGCGGGGT AACACCTGCT TCGGCTTYCC GGGCCAGCTG
AACGAGACCT GGCAAAGTGG CGGTGACAT GGTGCCCTTC CTGGCTGAAT TTTAATGCC CGGTTTGGGC CCTACCAGCC
GGGGAAGCA

SEQ ID NO:313: (Length of Sequence = 302 Nucleotides)

CTTCTCATGC CAGTCTAATG ATTGTTTTTA GAAAAGGATA TACATTGACC TTCAATGTAA TAAGAAATGC AACACTTTAC
GGTGTCCAAC TGCTAAGATT TATTTCCAAC TTGTGAGACA CAACTATTTT GCCCAATCCA AATCAAAGGG AATCAAGGCT
GTGAAATCCA CACAGGACAT CAACGCACAC ATAAATGAAA ACTACAGATG TGTGAGAGGC AACCATATAC ACACAAATAA
TGTAACACT AAATTCCATG AAGTAGCTGT CCAGGGAATA CTTTCCAAT AACCTTCAGC AG

SEQ ID NO:315: (Length of Sequence = 339 Nucleotides)

CGCGTTATTT AAATTGTGAA AAATAATGAA TATTAATTTG GAGCATAATA TTTAAATACA TGAAAAAGC TGGCTGGGAA
ATGTTGGCAT GACTTTTCCC AGATGTTAGC ACTGCTTCAA CTTTGTAGAG NGCACTCTGA GTGTAAGTTT ACTAGACTGA
CATTACTAAA ATCATTGGTG CTATAGAGGC AGGAGAATAC GGGGAATAAG AAAGCCAGTT GCAAGCCAAC AATCTTAAAA
CTCCTCCTTT TGCCATGGAC TGACGGCATA TTAAATGAGA TCATGCATTT TAAGNATTA ACAGTGATCA CCACATGTGC
GTGTTCCAAT AAAAGGAAG

SEQ ID NO:316: (Length of Sequence = 430 Nucleotides)

TAAGTGGTG GTGCTGTCTT GGATGCTTCC AGTGGGCCCC GACCAGGTCT GGACAATGCC TGGGGCCCGT CCCCCGCCCC
TCATCTACAC ACACGCAAGA NTTCCGAGCT CCATGGGGAA CAGAAGCAAG ATATCCGTAA AATCAAAGTC TAGGGGGTGG
GAATGAAAAG GGAAGTGA GGAACGGGGA GCCAAACCCA GGAAGACGCC TCTTTTCTTG CACATTCCTT CTCCTTTATA
TACTCAGCTC TTGGCTGTCT CCAGTATGTA CCCACCTGG TCTTCCAAGC TGGGAGCCAC TTTTATAAC ACAATCACAG
TTTCAAAAC CCCAGGAAGG TTCCATGTGG NGAGAGGTTA AGTTTCGNCC TTGTCCGGGG AATTATGACA CTCAGAATAT
CCCCTTGGT GTAAATGGAA GACAACCTTT

SEQ ID NO:317: (Length of Sequence = 317 Nucleotides)

GTTAATGCTT CTNATACCTA ACAAATCCTG GAGGGCAGNC AGCACCAACA CTCAGGGTGC TGGGAAAAGG TGGTGAGAG
ATCTGAGGCA TCTCGGGGCG AGGGGAGGGC TGGGAAGGCA GGCTGGCTNG GACCTTCGCA TCTTAACCTA ACCTTGACCC
TCTTTCCATG AGCAGAGTTC CGATGCCCTG GAAGCCTGGG AGAGTGGGGA GAGATCCCGG AAAAGGAGAG CAGTGCTCAC
CCAAAAACAG AAGAGTGAGG CTTCCAGGGT GCAGCAGGGG TGGGAGGTGA TCAAGCAGCG TGGGGATTGT AAGCCCG

SEQ ID NO:318: (Length of Sequence = 407 Nucleotides)

CTGCCCCGC ACCTTCCCCG CCTATGCCCC TGCTGAGAT AGGCCCTTCC CTCCTCCGGG AGCCTCCCCG GCCACGGAC
CCTCAACTTC TCCAGCCGCT CCACCCAGCG TTCTGGACC GCCTCTGCA GCGAGGCTC ACATCCAGCA CTGTCCCTTA

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CCTAAATATA TATGCACCA ATACAGGAGC AACTAGATT ATAAAGCAAG TCCTGGAGGT GCCTACAGAG GAGGCTTAGG
CTCCACACA TTA

SEQ ID NO:304: (Length of Sequence = 416 Nucleotides)

TTTTTTTGTAG ATGGAGTACT CGCTCTCTTG CCCGGGCTGG AGTGACGTGG CGCGATCTCG GCTCACCTGC AACCCCTGCC
TCCCCAGTTC AAGAGGTTCCT CTTGCCCTCAG CTTCCCGGGT GGCTGGAATT GCAGGCACAC ACCACCATGC CCAGCTGCTT
TCTGTATTT TTAGTGGAGA CGTGGTTTCA CCATGTTGGC CAGGCTGGTC TTGAGCTCCT GACCTTAAGT GATCCGCCAG
CCTTGGCCTC CCAAAGTCT GGGATTACAG GCGTGAGCAC CGTGCCAGG CTGTTTMTTA ACTGACTTTG GATTTTACTC
CCTTCTATG CAAATTTATT TTAGAATCTG TTCCTTAACC TTAGGGGGTT GGGTTAGACA AGTTTCAAGG GAGCCTCAAG
TGKAAATGCT TTAAGG

SEQ ID NO:305: (Length of Sequence = 223 Nucleotides)

CACACCCAGC TAATTTTGT ATTTTATAGTA GAGACGGGT TTCACCATGT TGGCTTGGCT GGTACGAAAC TCCTGGCCTT
GAGTGATCC CTTGCCCTCAG CTTCCCAAAG TGCTGGGATT ACAGGTGTA GTCAGCGTGC CCAGCCAGA TTTTATGTT
TTAATTACAA ATTTTACGTT AACTGATTCT GCACATTAT ATTTGCACAC TTGTGCTAGT GAG

SEQ ID NO:306: (Length of Sequence = 169 Nucleotides)

GTTTTGCCAC ATGGCCAGG CTGGTCTGA ACTCCGACC VGTGAGCCA CTTGCCCTGG CCTCTCAAAG TGCTGGGATT
ACAGGCGTGA GCACACGCC CGACCCATAG CTCCTTACAA CTGCTTGTA AAGAAAGCAT CATTGGGCAC TGTAGTATT
TCTCTGAA

SEQ ID NO:307: (Length of Sequence = 303 Nucleotides)

GATTGGTAC AGAGTATGC AGGAAGACAA CTCAGATGC CATTTTAAAT AAAGTTGTAC ATGAACAATA ATTGGAATCA
TCAGGTAAAT TTTTAAACA AAGTTCCTC ATTTACTGTT ATGATTGGAA AAAAAATTAG AAAATAAAGT AAGTSCATA
GGCTAATTAA AAAATAAAC CTTGGCCGGG CGCGGTGGCT TACGCTATA ATCCAGCAC TTTGGGAGGC CGAGACGGGC
AGATCAGNG GTCAGGAGAT TGAGACCATC CTGGCTAACA CGTGAAACC CCATCTGTAC TTG

SEQ ID NO:308: (Length of Sequence = 143 Nucleotides)

ATCTAGGAGG CTGAGGTGG ATGCCCCAG TACTGGAGGT CAGGGCTGCA GTCAGCCATG ATCATGCCAC TACACTCCAK
CCTGGGTGAC AGAGTGAGAC CCTCTSTCAA AAAACCTCAG TCAATVCAA CATACAGTAT ATT

SEQ ID NO:309: (Length of Sequence = 199 Nucleotides)

CCCACCTCA TAANCCCCAC TGGGGAGTCT GGGGGCTCT ATGCCATGT GCCTGGAATN ATNATATGCT CATCATTTA
TGAAGAATAA AATTGGINIT TCCTGCCITA AAGTTACATT CGTCTTCCG CTCAAATCCT GATCTGGTCC ATTAAAGAGT
GTTGCGAGAC AAAGTTTCTG AAAGATTAGA GAAGAATCC

SEQ ID NO:310: (Length of Sequence = 426 Nucleotides)

TCCCTGTACC ACCTCTTCT GAATACGAG GAAAAGTTCG TTATGGACTG ATCCCTGAGG AATCTTCCA GTTCTTTAT
CCTAAACTG GTGTAAACAG ACCCTATGTA CTGGAACTG GGCTTATCTT GTACGCTTTA TOCAAAGAAA TATATGTGAT
TAGCGCAGAG ACCTTCACTG CCCTATCAGT ACTAGGTGTA ATGGTCTATG GAATTAAAAA ATATGGTCCC TTTGTTGCAG
ACTTTGCTGA TAAACTCAAT GAGCAAAAAC TTGCCCACT AGAAGAGGCG AAGAAGTTCT TCCATCCAAC ACATCCAGAA

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AGATGTGGAA TCTCGTGAAG ACTTAATTAA AAATCACTAC ATGGCAAGNA TAGTGGAAC TACGTCTCAG TTGCAGCTGG
CTGACAGTAA GTCAGTGCAT TTTTATGCCG AGTGGCAGC ACTGTCTAAA AGACTNGCCT TGGCTGNAAA GTCTA

SEQ ID NO:297: (Length of Sequence = 244 Nucleotides)

AGTACGGTIN NCGCTNAAGC TTGAINATCG RATTGCCAAT CINCATATTT GTGTTAGAAT CATTGTGTTT TGIGTCTTCA
TGTTTCTATA AGATAGGACC AATATTCTTT ATTGGGCTTT GATTTTATTT TGTAACCTAA ATGTATTAA GCAATAAATG
TAATTTTCCA CTNAAAATA TCATTATAGA TTTGGTACT ACCTACTGCT CAGCAATTTT TTTTCTTATC AAAATTCTTC
CTGG

SEQ ID NO:298: (Length of Sequence = 152 Nucleotides)

CCTGAACAGG TAATGAGAAA AATTTACACA CAAGTGATTT TGAAACAGA ATGGGTTGCT TACAAATTAC AGGAAATGTT
ATAACACAAA CCAGAAGAAT TCAATGGAAG GCAATAAGGGAAAT GAAAATTATA AAAGTATCAN GA

SEQ ID NO:299: (Length of Sequence = 374 Nucleotides)

CGATGTTTTT AATGTCATCA CAGTTGTCT CAAATGAGT GGTGGCATCA TATGTGCGG AAATAAAGAT CTGGCTTTCT
GTCCCAAGT CTTTGGTAC CAGGAGTCA CTGATGCTAA CAAATTTCTG TTCAATTGGT TCCAAGAGCT CCAAAGCTGG
TCTGATTTCC TTCTCAGGCT CCTTGGTTTC CACAGTTGTA CTAACATAG CAATGTACTT CCTTGTGCT GCTACATTGT
GCGCAAAGGA GATCATGCAG ACGTAGATAT CTGACTTTTC ATTGACTTTG GTTCTGTGGA ATAATGATCT GGCAGGAGTT
GGCATCATTG GTGTCTTTG ATGGGGGTGG CTGAGGGATG CAAATAACCT CTG

SEQ ID NO:300: (Length of Sequence = 365 Nucleotides)

GGCTCACCAA GCTCAGCAAG TACGTGTACT TCTTCGAGGC CTGCCGGCTG CTGCAGAAGA TGATTGACAT CTCCCTGGAT
GGCTCCTGC TGACTCCGT GCAGAAGATC TGCAAGTACC CTCTGCAGCT GGCCGAGCTG CTCAAATACA CGCACCCCA
GCACAGGGAC TTCAAGGATG TTGAAGCCGC CTGTCATGCC ATGAAGAAGC TGGCCAGCT CATCAACGAG CGGAAGGGTA
GACTTGAGAA CATCGACAAG ATTGCTCAGT GGCAGAGCTC CATAGAGGAC TGGGAGGGAG AAGGATCTCT TGGTCAGGAG
CTCAGAACTC ATCTACTCGG GGGGAGCTGA CCTCGGGTGA CACAG

SEQ ID NO:301: (Length of Sequence = 224 Nucleotides)

GGTATTCAAA CAAATAGCCT GAGAATTTTG GGGGATCTG AAATAGAGTA CTATGCTATG TTGGCTAAAA CTGGTGTCCA
TCACTACAGT GGCAATANTA TTGAAGTGG CACAGCATGC GGAAATACT ACAGAGTGTG CACACTGGCT ATCATTGATC
CAGGTGACTC TGACATCATT AGAAGCATGC CAGANCAGAC TGGTGAAAAG TAAACCTTTT CACG

SEQ ID NO:302: (Length of Sequence = 363 Nucleotides)

AGTTTCACTC TTGTTGCCCA GGCTGGAGTG CAATGGCGTG ATCTCGGCTC ASTGCAATCK GCACCTCCG GKTTCAGCG
ATTCTCCTGC CTCAGCTCC CAAGTAGTTG GGATTACAGG CATGCGCCAC CATGCCCGC CAATTTTCTA TTTTCTGTAC
ACACAGGGTT TCTCCATGTT GGTGAGGCTG GTCTCAAACCT CCAACCTCG GTGATCCGTC CACCTCGGCC TCTCAAAGTG
CTGGGATTAT AGGCATGAGC CACTGTGTCC GGCCAGCTCA AACAAATTTA ATGCTTCTTT CAAGNCTATT AGAAACCTTT
AATTGCTTCT TAAGTTTCTC CCCCACCTAT GGAGGAAGCA TAT

SEQ ID NO:303: (Length of Sequence = 253 Nucleotides)

ATGCAGGAAS ATCTACCARG CAAATCGAAA AAAAAAAG GCAGGGGTTG CAATCCATCT CTCTGATAAA ACAGACTTTA
AACCAACAAR RRTCAAAAGA CACAGAGARG GCCATARCAT AATAGTAAAG CGGATCAATT CAACAAGAG AGCTAACTAT

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SEQ ID NO:290: (Length of Sequence = 353 Nucleotides)

GGTTTTCATC TTCGGTTTAC AAAAGTCCIA CTATTTATTT ATTTTAACCT TAATTTAAAT ATCACCTACC TTAGGTAGAA
 GTTTTCCTTT GIGTAATATA ATATAAAACC GACATTTCTT GGGGGCATAA TAGTAAAGAT GTTAACATTT TTTGGTTCTT
 TTTGGATGCT GTATTTGTGC TTCTTCTGAA AGTGATGIGT GCCAAGATGG CTCATGTAAAC CCAGTTTGA CTAGGCTATT
 GATATTCIGT CIGGTTAATT TATTGAACIG GCTTAAAGCT ATACATATTT CCTTTTAGNIGTAA GATATTCAG
 ATATATTGGT CFACTGATC ATAATATCAC TGG

SEQ ID NO:291: (Length of Sequence = 163 Nucleotides)

CCTGGTAGGC CTGCTACACA GTCTTGCAAC GNCCCTGTG CTGGGCTTC TGCGGTGAGG CAGGGGAGTC TGCTTGCTT
 AGATGTTGGT GGTGCAGTCC CAGGACCAAG CTTAAGGAGA GGAGAGCATC TGCTCTGAGA CGGATGGAAG GAGAGAGGTT
 GAG

SEQ ID NO:292: (Length of Sequence = 397 Nucleotides)

ACGGGAAGGT GAGTATGTA GTATGINTGC CAGACAATGG TGTTTCCATG TCAATGGAGG TTTCTCAGAG AGAGGTGATC
 TGGCTGGAGA AAGCTTAATC TGGTGGCAAT GGACAGGTGA CTTTAAGAAG TGGGGAACGA GGAAGGAGG CCAGTTTGAA
 AATNATAACA AGGGTCCAGA CTCAGTGATG CAGCAGTGAC CATGAGAACG GAGCAGCTGC AGGTAGAAGA TGGAGACAGA
 ACTNGGGAGA TCTGGTGGAG GTAAGCCGCG TGGAAAGATG ATGTCAGGTT TATACCTAGA GGACACATGA TCCATTACA
 AAGCCAGGGG NAACCTAAAG AGAAAACACT TAGAATTTTN GGAGAANAGG CTAGGGCTGG GCCTTAGACA TGGGCTG

SEQ ID NO:293: (Length of Sequence = 360 Nucleotides)

GAGGTAAAAT TTACATACAG TGAAATCCAA ATCTTAAGTG TACCACTAGA TAAATTTTGA TAAATGCATT ATGCCCTGGTC
 TTCACACACC CTTTTCAATA TATAGAAAAT NTCCAGATAA TTTATTTTGT TGTTTTTTTC ACACACTAAG TTCTAGACTT
 TTCCAGGTCC GAGGGAACTA TTAGGGGGGA AAGTACTTGT NATAGTAAAA AAGATTTTAG GTGTGTTTGT TTTTAAGGTG
 CAGAAACACA TCGCAGATT AAGGTCGCA ATCTCTGCTT TTGTTATTG TTCCAGTTT GATCTCAGTG ACATTACAAG
 CAAGCAGAAA CACTCAGACA TGAAATGGCC CAG

SEQ ID NO:294: (Length of Sequence = 321 Nucleotides)

TTTTTTTTCAG GNTTCAACCG TTTTATGCG AGGTTTGTG TTCTGTGAAA TACACTAGAG GGTGGGGAAG GGGACACATT
 CACTTTGCAA GATAAGGGTT TCCCACCACT AAAGGAAAGG CATGGGGCAG GGCACACTGG GGTTTGGGTC CGTTTTCCCA
 CCTCCTTCG CTGGGCTCAC TTTTCTTTTC TCTCAGCAAG TACCACAGAA CACAAAGACA AGAAACAAAA CAGCAAATCA
 ACCTCCAACG GGGCCATGCC AAGCCTTCCC CACTCCCCCA GGCTGGGCAA GGGCTGGGAG GGGGCTGGGG CAGCTCACTC
 G

SEQ ID NO:295: (Length of Sequence = 165 Nucleotides)

GACACACAGC GCCTCCGGCC COGCACAGGG GGCATGTCCA GAGGTGCTGT GTGTACCAA CTGGTCTTCT AATTGGAAG
 GAGTTGGAAG GGCCTTTTGT TTGATGAAAA GTTGGAAACA GTGGCACATA TCTNAGAGGG AGGAACGAGG CAGCGTGGTG
 AAGCG

SEQ ID NO:296: (Length of Sequence = 315 Nucleotides)

CGAATACAGG TAGTGCCAG CTGGTTGGGC TGGCCAGGA AAATNCTGCT GTGTCAAATA CTGCTGGCCA GGATGAAGCC
 ACAGCTAAGG CTGTGTTGGA GCCCATTCAG AGCACCAGTC TAATTGGGAC TTTAACCAGG ACATCTGACA GTGAGGTTCC

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GCCCCCTGTC CCAGACACAG GCACCCCAAA TCTCACTTTG GACAGAGCCA ACGTGGGGGG ATCCTCCCGG GCCTGGGCCT
GTCAAGTCTG CCTGCAGGAC CCTGCCATTG TGCTCAAATC ACAACCATTT TTTGCTTCCA ACATTTTAGG GTGCTTGTC
AGTGAGT

SEQ ID NO:284: (Length of Sequence = 340 Nucleotides)

CTTTGGAAAT GTAAATTGTT ACAAACCTAC TTTAGAGCAA ATTTAGTCAT CCTTCAAAAA TTAAATGTA TACTTATTTT
CTAAGAATTC GTTTGGCTCA CACAATTGTG AAAAGATAGA TGTACACCAG TGTTCATTAC AACAAATTAT CAACAAATCT
ATTATGTGCC AGACATTATT CGGAACCTCG GGAATACATA AGTGAACAAA GCAGATTCCT GATCTCAGGA CCTGGGGTCA
GGGGTCAGGA GAAGCCAAAA AACACGCTNG AGAAATACTT TATGCAGTGT GGGGGGAGTG CTACCAGCAG AGCAGGGGAT
GGNGATGTGA AATCTTGTTT

SEQ ID NO:285: (Length of Sequence = 335 Nucleotides)

GACATTCACG GAGGTGGGTT CGACCTCCGG TCCCCCACC ATGACAATGA GCTGGCAGAG TCGGAGGCCT ACTTTGAAAA
CGACTGCTGG GTTCAGGTACT TCCTGCACAC AGGCCACCTG ACCATTGCAG GCTGCAAAAT GTCAAAGTCA CTAAAAACT
TCATCACCAT TAAAGATGCC TTGAAAAAGC ACTCAGCAGC GCAGTTGCCG CTGGCCTTCC TCATGCATC GTGGAAGGAC
ACCCCTGGACT ACTCCAGCAA CACCATGGAG TCAGCGCTTC AATATGAGAA GTTCTTGAAT GAGTTTTTCT TTAAATGTGA
AAGATATCCT TCGCG

SEQ ID NO:286: (Length of Sequence = 399 Nucleotides)

GCACAAATAT TAAAAAGAGG CCACCTAAAT TCAACTCTCC ATGGATACAG TGTCTGTGGC AATGTTTTAT TAGAGATTAA
AATTGAGGAA TTGAATAATT GAGGTGCTA ATGAATTTGA AACTCAGCA AAGCAAGGAG AGCTGAGCGT TTTTCCGACT
TAGCTTTTCT TTCTTAACC CTTTTCTCAT TTCTACTAT TATCACAINT CTGGCCTTGA CTGCTGAGTT TATTACTACC
CATAACCTG GCCTAAGTGG AAACAAAAA GCTGTAGCCT CTTTGTGAG CTCCTGGAGA CATTTGGTCT ATTGGATTTA
TGACATGTTT AGAAGCTTGC AGTTGCAGGA GGCTGACAAT GATGAAATG AGATATGNTG GGCCACCAGC CTTTTCTGT

SEQ ID NO:287: (Length of Sequence = 294 Nucleotides)

TTCCAGTTGA ATTCACCAAT GGACAAAATG AGGAAAACAG GTGAACAAGC TTTTCTGTGA TTTACATACA AAGTCAGATC
AGTTATGGGA CAATAGTATT GAATGATTTT CAGCTTTTAT CTGGAGTAACT TGGCATGTGA GCAAACTGTG TTGGCGTGGG
GGTGGAGGGG TGAGGTGGGC GCTAAGCTTT TTTAAGATT TTNCAGGTAC CCCTCACTAA AGGCACCGAA GCTTAAAGTA
GGACAACCAT GGAGCCTTCC TGTGGCAGGA GAGACAACAA AGCGCTATTA TCCT

SEQ ID NO:288: (Length of Sequence = 391 Nucleotides)

TCTACAGATG AGGAAAGCAA GCCTCAAGCA AGGGGGGCCT GATCCTTTCC CTGTTCCCTG TGTATTCCCT GTCTGTGGCA
AAGCCCATTG CTTGATTCT CTCTCTTTA CTTTCATGTT GAGAAGTAGT TTCTTTCTGC AGTTTATTTA ATTTACTGGC
AAAATGACGT ATTTTTTTTT CAGCAATGTT TCAGCTAGAT ATTTGCTTTA TGCATGTAAT GTCAATGAAG TACTCATAAG
TTTTCAAGAA ATGACTGATA TAAATCATGT GTCCACTAC ATAGTCTAAA TATTTAGTAT TTGGTCATCT ATTTTAATAT
GTTCAAAATC TGTAAACAA GNCATAGTCA CTATGTGAAG ATAAAAATAG NCAAGTTGC ATTATGACTT T

SEQ ID NO:289: (Length of Sequence = 198 Nucleotides)

CTTATATTCT ACTTATTGTT GTAAACTCA GAAACTAACA ATTCACATCC TCCCACCTTC TTCTTTCCGA AGAAGGCAGT
TTGCAGAGAC AAAAGGGCTG TGGCGTGGGG ATCATCCACC ATCTCCAGGT TTTACACCCA GGCTACCCAT GGCTTGGCAG
TCAGGCCTCT AGGCTGATTG CTCTCAGAGG CAATAGAA

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CCCGTGGTCC AGATCATTTA TAGTGACAAA TTTTAGAGAT GTTTATGATT ACTTCCGAGC TGGTCCTGCA GCGTTGATGA
AAGAAGTGAA CGAGCTTTTA AGTTAACCCG GGATTGCTAT TNAGTTAAAT GCAAGCCAAT T

SEQ ID NO:277: (Length of Sequence = 206 Nucleotides)

TTAATAOGAC AGGGCTGGCG CCGAGTAAAT TCAAGCCCTT CGGAAGTGTG ACCGGCTGCC AGGCCTGGGA TGCAATCCTG
GAGGCGGGAG ATTGGGCTIN AAGACTGGCT CGAGCCGCC AGGGGCTCCA TGGGAGACTA ACCGGGAAGT YCCAGCCGTC
CCAGTGCCGT GACGTCCCCC CTGGTGGGG OCTGCACCG ACTACT

SEQ ID NO:278: (Length of Sequence = 260 Nucleotides)

ACCTGTAAAT CCNGCACTTT GGGAGGCTGA GTTGGGCAGA TCACGAGGTC AGGAGATAGA GACCATCCTG GCTAACACGG
TGAAACCCCA TCTCTACTAG AAAAATACAA AAAATTAGCC GGGCATGGTG GCGGGCGCCT GTAGTCCAG CTACTCGGA
GGCTGAGGCA GGAGAATGGC GGAACCCG GAGGCGGANT TGCAGTGAGC TGAGATGCGC CCGTCTCTCC AGCCTGGGCA
ATAGAGTGGG ACTCCATCTC

SEQ ID NO:279: (Length of Sequence = 308 Nucleotides)

GTGCTGGGC TCAGGGTTGG CCAGCTTGCA GAGGAGCAAG CTAGTAGAAA TATTGCAGGG TTCCCAAAC CAGGTCAAGC
AAGATGCCAT GTCACCCCTG AGCATGCCCTG TCTTCCAGG GGTGTACCTC TTGGCTGGCA AAGCCAAGGC CAGTGGGAC
TTGTATAAAT CACATGGGTA TGTCCTGGT TCAGTGATCT TGGAGTGATG ATGGTAACTN ATGAACAGAG AACTTTTYAG
AACTTKGGTC CTGTCTTCT CCTGAACCT AGACAAGTTT CACCCCTCCT CCGTACCCA ACCCCATT

SEQ ID NO:280: (Length of Sequence = 402 Nucleotides)

ATTTTAGCAG CTTTCTGAA ATTTAAATA TATGTGTAAG TATCTCATTT ATATGCATTT CTAGTTTCTT TATACAACAG
AATAACTTCT TTTACATCAA ATTTCTGAAT TTGACTAAAT TTAGAAATAA TGAATCTCA TCCATTAAAT ATAGTCATAG
AAGGAAGGAA ATATGAAAAT TAGGATTTCA GATGTTTGAA CATAAAGAT AATTTTAAAC ATTGTAGTA ATCTATTCT
TTTTTTTTT GAGACGGAGT TTGCTCTGT CACCCAGGCT GGAGTGAGT GCGCGGTCT TGGCTTACTG CACCCCTGTC
CTCCAGTTC AAGTGGATTC TCCTGCCTCG NCTCCTGAG TAGCTGGGT TACAGGGGCA TGCCAACATG CCGGGGCTAA
TT

SEQ ID NO:281: (Length of Sequence = 313 Nucleotides)

GAGAATCCGT CTTAAAAGA AAAAAAGAA ATTATAGAGG GAGATGAGT GGGACAGAGT CTGGCAGTTC ATCAGGGGGA
CTGAGAAGGT GGCATTGGA GGAGAGGAGG CAGTGAGCTG TGCAGTGTC AGGCAGCCAC CCTTCCAGC GGCCACCATG
ACGGTGTCTT CATGTCTTA ACCATTAGTA ATCATTCATT CATTCAATCA TTTATCCGAC GTCAGCTGGA GGCCTGCCC
GNGGGCATG CGCTTAGATT TNGGAGGCT TCOGGGATG TTGCGCTCA ACGGGGGAAG GCGCACTGG GCT

SEQ ID NO:282: (Length of Sequence = 217 Nucleotides)

TGACCTCAGT TGATCCACC ACCTTGGCT CCCAAGTGC TAGTATTATG GCGTGAACC ACCATGACCA GCGAAAAGC
TTTTGAGGGG CTGACTCAA ATCCATGTAG GGAAGTAAA TGGANGGAAA TTGGGTGCA TTTTCTAAGG ACCTTTCTAA
CANATGGCTA TAATNTAAGG GGTTAGGGT CCTTTTTTT TTTTCAGGA TACATT

SEQ ID NO:283: (Length of Sequence = 327 Nucleotides)

TAGAGAGCG TTTACTCTG GTCCATGGC GTAAAGATGT GGCTGGGCT GACAAGGCTC AGCCTCCAGT CTTAAGATGG
GCACAGAAG GCAAGAAGTA AGATGACGAG TCCAGAATT AGGACAAGCC ATGAGCCAAG GCCTGGTCTG AGCAAGGGCA

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GCGGCCTCCT CCCTGGTGTC ATATGTGCGC ACGTCTGTCT TCCTGCTTGA CTTTGGGGAT CTCGATGATC CTGGTGCTCC
TGTGTGCTTT CCTGATCCCC TGCTCTCCA GAGATCTTGA CAGAACTGGA GCGGCA

SEQ ID NO:271: (Length of Sequence = 346 Nucleotides)

TGTTACGTT CCCCTTCTTT GTCTTCTTT TTCTATCTT TATCTATCT TCGACTCCTC TCCTTTTCC TCTCTGTTC
TTTAGCCTCA CCTTATGCT TATGACTGTA CCCACTAAGA TTTCACGTT GATCATCAAT TTACGCTA TCTCGACTCC
TACTGCGACT GGCACGATT GTCTGTCTAT CCCTTGAGCG ACTTCTACGA ATGCTTATGA AAAAGAATCA AGTTGNCAC
CAAATGTTT ATAGCAGTAG GAAATTTCTT TTAGAGACTT CTGATGGGAA ATTTGAAGTG TATGTTGCTA TCAGATCAAG
TGCAGGAGAG GTATAAGGCT ACTGGA

SEQ ID NO:272: (Length of Sequence = 394 Nucleotides)

GTGTTGTTG TTGAGTCGA GTCTGCACT GTGCTGCGG CTGGAGTGCA ATGGTGCAAT CTCGGCTCAC TGTAACCTCC
GCCTCCAGG TTCAAGCCAT TCTCTGCTT CAGCCTCTTA GTAGCTGGGA TTACAGGCAC CTGCCAGCAC ACCTGGCTAA
TTTTTATAT TTTNAGTACA GACAGGGTTT CACTATGTTG GCCAGGCTGG NCTTGAATC CTGACCTGT GATCTGCCA
CCTCAGCCTN CCAAAGTTT TCAGAATTT TTAAGGAAAC ACTTTTAACC CTTAAGGCTT TCTTTCAAAC TCAGATCCCC
TTACACAAT GATCAGACGT GGCAAAGTT TGCTTCAAAG TTTTGGACT GGGTTCCAC TTTAGGCTTA CTGA

SEQ ID NO:273: (Length of Sequence = 259 Nucleotides)

CAACCTGTAC CCAGGCTGCG AGAAGCTTAG TTTRAGGAGC CGCAGCATGA TGTCGAGCC GGTCTTACC AAAGGRATGC
TGGAGGTGT TKTGGCCCG ACCCACCACC CGCACTGCTC GGCCGATGAC CAGTCCACCA AGGSCATGA CATCCAGAAC
GCTTATTTRA ATGGAGTTGG CGATTTGAGC GTGTGGGAGT TCTCTGGAAT TCCTGTGTAT TTCTGCTGTW ATRACTATTT
TGCTGCAAT AATCCACG

SEQ ID NO:274: (Length of Sequence = 348 Nucleotides)

TCCAGTTGT CCCGATTGTA ACTCAAAGG TGGAATATCA AGGTGTTTT TTTCATTCCA TGTCGCCAGT TAATCTGTCT
TTCTTGTTT GGCTGGGATA GAGGGTCAA GTATTAAAT TCTTCACACC TACCTCCTT TTTTCCCTA TCACTGAAGC
TTTTTAGTGC ATTAGTGGG AGGAGGTTG GGAGACATA CCACTGCTTC CATTTAATG GGTGCACCTG TCCAATAGGC
GTAGTATCCG GACAGAGCAC GTTGCAGAA GGGGACTCT TCTTCAGGT AGCTGAAAG GGAAGACCT GACGTACTCT
GGGTAGGTT AGGACTTGCC CTCGTGGT

SEQ ID NO:275: (Length of Sequence = 396 Nucleotides)

GTITGGTGAA TTTGGTCTGT GATAAAATG GAGTCAAGA AACAAACAGG AAACATAAG TGCCCCCTCG CCCCCAGGTC
ACCGAGTGG CAGGGCAGT ACCGCTGCTC TCAGGCTGCC CAGTGTGGAC CTGCTGTG GAATGCTCCT CCTCCAGTCT
CCCTGCTCC TGTGTCCAG CCACATGCAC CTCTCTCTA CCTCTGGAT CCCTGCACCA GGTCTGCCCC TGTCTTCTCA
GGGCTGCTCC TMTGGNCCA CAGGACCTCA GCTGGAATGT TGCTCTCTCC AAGAGGCCTT CTTGACTATT CAGCTCACAG
TGGCCACCA GCCACAATCT GGCATGTGCT TTGGGGGATT GTCTGTAAAC TGGCAACATA CTGCGAGCCC ATAAC

SEQ ID NO:276: (Length of Sequence = 381 Nucleotides)

GGTGTGGGG AGGCTGCGCA AGGGGGCGAG CCGGGGCGC CGGCGCAACC CCGGCCCCAG CCGCACCAC CGCGCCCCA
GCAGCAGCAC AAGGAAGAGA TGGCGGCGA GGTGGGGAA GCGGTGGGT CCCCCATGA CGACGGGTT NTGAGCCTGG
ACTCGCCCTC CTATGCTCTG TACAGGGACA GAGCAGAATG GGCTGATATA GATCCGGTGC CGCAGAATGA TGGCCCCAAT

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TTTTGCTGT CAACAGACAG TTTATTCTAT ATACAAACAC AATTTTGTAC ACTGCAATTA AATAGAATGG AATGAGCGCT
 CCTCCGATT CCTCCCGAG TGACTGGTTT GCGCGCGGC CACTCCATCC CCGAGTGGGA CTGGACCAG GCGCTGNTG
 CTGCACTGA TGTTGGNGCC TGCACCCAC GTCCCTATGC CCGAGGCGCA ANTCIGCTCT CCGGGGACC CCAAGNCTGG
 NGCACACGG GGGAGGGCGG GGCCATGGAG AAGGCACTGC AGGGAGCACC AGGCAGAGCC GTGTTGAGGC CGGCCGG

SEQ ID NO:265: (Length of Sequence = 270 Nucleotides)

GCAGAGCAGG TGAAGTGAT CAGGAACCAT AGTTGACAGT TCCAATCAGT AGCTTAAGAA AAAACCGTGT TTGTCTCTTC
 TGAATGGTT AGAAGTGAGG GAGTTTGGCC CGTTCTGTTT GTAGAGTCTC ATAGTTGGAC TTCTAGCAT ATATGTGTCC
 ATTTCCTTAT GCTGTAAAAG CAAGTCCGCG AACCAAACCT CCATCAGCCC AATCCCTGAT CCTGATCCC TTCCACCTGC
 TCTGCTGATG ACCCCCCCAG CTTCACCTCT

SEQ ID NO:266: (Length of Sequence = 297 Nucleotides)

ATGAGGCGAG GCGTGGGAG TGCTGGCAT GCAGCAGGTG CTAATGAGTG TTGCAAAGGT GATGTCACGC AGGCAGCTTC
 CCGTGGCCAG AGAAACATTG CAGAGAAGGG ATAAGTAGGG CTTAGTACT TTGACGGGTC AATGGAAGAA TGACCCAAAG
 AAGCTTCAA GGCCAGGCTT GCAGTTCTCC ACCACAAAGG CCTTACTGA TAGCACCAC TCCCCACAC TCAGCTTTG
 GGCTAGGTC TGGGTACCC AGCTAGAAGC CACAGGACCC TGAGGCGTCC GAGGGGT

SEQ ID NO:267: (Length of Sequence = 387 Nucleotides)

CTTGTTTTCA TCATGAGCTC GATCAGATGT CTCTCGATCT TCAGACTGGT GGTGCTCTAT AATGTCCTGT GCACGCATTC
 TTGAGCTTTC CAGGATTTCT GTCTGTCTC TCTGTTATC TACAGAAGAA ACTTCTCTCT TGAGTTCTGT TTCTTGCTAG
 CGCTTGAAC TCTCTTCTCT TTCTGGTTTA CGATCTCTCT CTTTCCATCT ACCCTGTCTG TCTTCTGTGA GGTGCGAGGG
 ACTAAGAGAA CGAGATTCCT GAGGTCTGAC AACTTGGCTC AAGAGTCTGT GTTTTTTCAT TTNNATCAT CTTCACTGTT
 GTAGGCATCA CTGTCCGGAG AATGTTACG CCGGCGCTTT CGGGGACTG TCTAGGGCTG GGACTCC

SEQ ID NO:268: (Length of Sequence = 318 Nucleotides)

CCTGAAGGTT ACCTCTTTTG AGAGAACATG GATCTGAATC TCCTGGGCG CCGCCCGGTC CAGTTTCCCT ACGTCACTCC
 TGCCCCCAC GAGCCCGTGA AGACGCTGCG GAGCTGGTGA ACATCCGCAA AGACTCCCTG CGGCTGGTGA GGTACAAGA
 CGATGCGAC AGCCCCACCG AGGACGGCGA CAAGCCCGG GTGCTCTACA GCCTGGAGTT CACCTTCGAC GCGATGCCC
 GCGTGGCCAT CACCATCTAC TTCCAGGCAT CGGAGGAGTT CCTGAACGGC AGGCAGTAT ACAGCCCCAA GAGCCCT

SEQ ID NO:269: (Length of Sequence = 422 Nucleotides)

ACATGTCTAT TCAGGTCTTT TGCCCATTTT GAAATAGCAT TGCTTGTCT TTTGCTGGAT AITTAACCCCT TGTCAGGTGC
 ACAGTTTGA AGTTACCTTT TCTCATCTA TAGGTTATCT CCTCACTCTT GATGTTTCT GTTGTGTGC AGTAGCTTTT
 AAGTTTGGT TAATACCAT GTGTTTTCTC TGCTGCCCTT TTAAGTTTCA CTGGGTCAA AGTTTAAAT TTGTGAATTC
 CTATATTTT AGGGCAATTC TCCTGCCACT GTTGAATTA TGCTCAATC TATGCAGTAG AATATTAGTG TGAAATGCTT
 CTGTACCAAT GGAGATGAT CTGGATGTC TCTATCATA ACCCATACCT CATCAACACA AACTGCAATT ACACAAGGC
 TCTATATCAT GGATCTCCAT TT

SEQ ID NO:270: (Length of Sequence = 376 Nucleotides)

GAAGAAGAGC CCAGACCTAG GGGAGTATGA TOCACTTACC CAGGCTGACA GTGATGAGAG CGAAGACGAT CTGGTGCTTA
 ACCTGCAGAA GAATGGAGGG GTCAAAAATG GGAAGAGTCC TTTGGGAGAA GCGCCAGAAC CCGACTCAGA TGCTGAGGTT
 GCAGAGGCTG CAAAGCACAT CTTTCAAGAG TCACCAAGGA GGGCTACCCC TCAGAACCCC TTTGGGGCCT GGAACAGAAG

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GAAAAGAAGG AAGGAAAGAG GGGAGGGAGG GAGGAAAGGA GAGAGGGAGG GAAAGAAGGA GAAAATGCTG GAGCAAAGGA
GGTTGGTTAC ATGATTTCCTC TAATGGCAAT GAGCTGCTTT CTGGATGAAA TACAGAATCA GAGCGAGACT CCGTCTC

SEQ ID NO:259: (Length of Sequence = 361 Nucleotides)

AAGCAGATAT AAATGGGACC ACTGTGAATC AAAGGGGAAA AATTCCAGGA AAAAAAATT CCAATAGCTT CACAGTTTAA
CTGAGGTTTT GGAAAACTT AAGTGAATTC AGCTGATGTT TGAATATCT GTCTACATTT AATTAGATGT GTGTATTTTA
CCAAGGAGGC ACAAATATGT AGTTCTGTAG ATTTTAATAC TAACTTTTCC AGTAAGAAAA ATAATACCAG GTGATTTCAA
AAAGGCAGT GATCTATAAA CACTCAAAT GCATCTTTGA ACAGGGGAGC AGAAATAGCT AATTTAATGA AAACAAACCT
TAAGCACTTT ACTTGGCTTC TAATAAGGCA TCCCAAGAAA A

SEQ ID NO:260: (Length of Sequence = 349 Nucleotides)

CAATACATGT ATACAGTGA CACTGATCAA ATAAGAGTAA TTAGCATATT TATCACCTCA TTTCTTTTGT GGTGAGAACA
TTTAAATCC TTTCTTTTGT CTATTTTGAA ATATACAGTA CATTGCTATT AAGTATAGTC ATCTGGCTGT GCAATAAAC
ACCAGACTT ACCCTCTCTG TCTGTGACTT TGTACCTGT TCACCACCCC TCCAATCCTC TAGTAACTAC CATTCTACTC
TCTACTTCTA TGAGCCTGAC TTTTAAAT TCCACATGTA AGTGAGATTA CATGGTATTA TTCTCTNGT GGCTGGCTTA
TTTCACITTA ACATAATGTC CTCTAAAT

SEQ ID NO:261: (Length of Sequence = 415 Nucleotides)

GGAAGATGAG GATCTAGGTG TGAGCGTGCA GAGCCCTGAG GCTGGGCAGG CAGGGAGCTC TGCCTGCACA ATGATGTAGC
CATGTGTGGC CACACCAGCA CTGGGCAGCA CCTCTGGGGA GGGGGCAGG GCAAGGACAA CTGGAGAGAC AAAGCCAGAT
GGGGCCACGT CCTTAGAAGT GTGTGTGCAC GCACATGTT GTGTGTGTGT GTGTAATACG CAGGGCAGAA ACACACCATG
TAGGTCAGGC AGGACAGAAA CACATCAATG AGGCCAGCG TGGTGGCTCA GGCTGTGAAT GCCAGCACTT AGGNAGGCCA
AAGTGGGCGG ATCACCTGAG GTCAGGAGTT CGAGACCAGC CTGSCCAACA TTGCAAAACC TCATCTCTAC TAAATTTCTA
AAATTAGCCA GCGGT

SEQ ID NO:262: (Length of Sequence = 382 Nucleotides)

GGCATGGGGT CTGGCTTTAA TGIGTAACTG ACGTGGGTCA CTGAACTGT TCAGGCTGAT CTTGAACTCC TAGGCTCAAG
TGATCTTGCT GCCTTGGCCT CCCAAAGTGC TGGAAATTACA GGAATGAGTC ACAGCACCCA GCGGCTGTG TTTGTTTTT
TGTTTTTTAC CCGACAGGT NCTCAGTCAG TCGTTAGCTG GAGTGAAGTG GCGTAACACA GCTCACTGCA GCCTTGATCT
CCTGGGCTCA AGTGATCCTT CCATTTCTTC CTTCAGAGT AACTGGTACT GCAGGCCAC GGCACCACAC ATGGCTAATT
TTTAAATTTT GTAGAGACGA GGTCTTGCCA TGTGTGCTCA GGCTCCAGCT GTTGATTCT TT

SEQ ID NO:263: (Length of Sequence = 447 Nucleotides)

TGTATCAACT CAGAAATTC AGAGAGCTCT TCCTGGCTGA AAAGATGTCC AAGGATCATC TCCGGAATGG AAGAGGTGAG
GCCTGTATAG TTGTGGGCTG CCCAATCCAT CCAACCTTG GCATTGGGAT CAATGTTGAT GAGGACAAGA CCTTCAACAG
TGTCCGGGTG GTTAAGAGCA TATCTCGCCA GGATGTAGGC TCCAGCTCCA ACACCAACTC CAATTATTGT AGAGAAATTT
AGGTACTGCA GGACGCAAGG GATCATGTCT GCAAGCTGGT CCAGAGATGG GTACTGATAT CCCAAAGGGA ACACAGGGGC
TCCCTCTTCC ATTCCAGGGG CATCCACATG GACCCGCACA AAGTCTGAA TGATTTCTCT CATGTCTCTG AACTKGAACA
GTGGCTGGAG GAAAGATTTA TAGTTGAGTC CACATCGGGT AGGTAAG

SEQ ID NO:264: (Length of Sequence = 317 Nucleotides)

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SEQ ID NO:252: (Length of Sequence = 314 Nucleotides)

CCTGAACAGT CTGTTTCATT TGACTGTTTG GGGGTCTCCC AGTTTAAAGCA AGATATTTAA GCCTTATTTT TCTTGGCATG
 CTGGATTCC CCAGTAAAAA AAACCTCTGC CTTGGGCTGA CAATCAAAGT TCTGGGAAGT AATATGGATA AGCAAGCTGG
 AAATGGAGAA GGCTATTCAC TGTCCTGGG TCTACTGTT TCTGGNTGG GAACTGCTTT TCATTAGGC CTGGTGTGCC
 CTGGAAGGGA NGAGCTCTT GCAGAGACTA CAATCTTGA TGGGTCTTT GCCAAGTTG AAGGTAGGAA CCA

SEQ ID NO:253: (Length of Sequence = 293 Nucleotides)

GAACACTCTG CTCCAGCCAA GGTGGTGAGG GCAGCTGTT CTAACAGCG CAAAGGCAGC AAGCCACAGT CCCACAAGCC
 TCAGCCTACC CGTAACTGC CACCAAGAA GGACATGAAG GAACAGGAGA AAGGAGAAGG GAGTGATAGT AAGGAGAGTC
 CAAAAACCA ATCAGATGAA TCAGGGGAGG AAAAGAATGG AGATGAGGAT TGCCAGCGAG GGGGGCAGTA GAAGAAAGGA
 AACAAACACA AGTGGGTCC ATTACAAATA GACATGAAGC CTGAAGTGCC CAG

SEQ ID NO:254: (Length of Sequence = 413 Nucleotides)

CTTTTCTTA ATATATTAA ATTTACCAAG GCAAGACAGT GATTTATGGA CATTTAAATT AGTTTAGCTT TGTTCCTCTG
 TTCTAAACA TTGTGTACTG TCTGATAGAC TTTTAAAAA CAGTGTCTT CCAGGATGAT TTATGATATG CAGTATGTT
 TATAGATGCC CATGGCTTAA CCTTGAAAAG TCAATTAAGT GACACAATTA AGAGAGATAT GAATAGTGGT AGAAAAAGCA
 TGTACTCTGG ATAAGTGGG GTAAATCTAG TATTTGTAT TCTGTCTAGT AATATTGTCA NTAGTATTTT TTAGAAGGTT
 TAATTTTFTT ATGGGTTATA AATTCATGTC ACTCTCTGC AATGGGTACC ATCAGTGGGA ATGCTNGAAT TATCCATGCT
 TTGGGGGTTA AAA

SEQ ID NO:255: (Length of Sequence = 376 Nucleotides)

GGGTCCAGGG GAGAATCAAT ATATCTAGTA TAGTTTATAT TTGTACCTTC TCTCTTAAG AGTTACAGTG AGTACTCTA
 CTCTCAAT GGAGCACTC TCTCCAGGAG AGTAAGAAGA TCACATAAT AGAAAGTGAG CTTGGACTC TAACAGACAT
 AGGTTTATAT TCAACTCTGC TACTTAATAT CCATATTGGT TTGAGTTATT TAACCTTGAC AATCCACACT GTAAATGGG
 TAAATAATA ATACCTCTC CTCAGAAGTG TTACAAAGTT TATATGAAT AATGTGCTTA AAAAGCTGGG TACATAGTAG
 GAGCTTAGTC ATGTTTATT TTCTCCCTCA TACCATACA TGTTCATTC CTACTG

SEQ ID NO:256: (Length of Sequence = 241 Nucleotides)

GTAGAGATGG GCTCACTATK TTGCCAGGC TGGTCTGAA CTCTGAGGT AGGAGGATCG CTGAGCCTG GGAGACAGAG
 GTTGCAGTGA GCGAGATCA CGCCACTGCA CTCTGCCCTG GGTGACACAG TGAGACTCTG TCTTAAACAA AACAAAACAA
 AAAAAGGCCA GCGCAGGGG CTCACACCTG GTAATCCAG CACTTTGGGA GGCCAAGGTG GGTGGATCAC CTGAGGTCAG
 G

SEQ ID NO:257: (Length of Sequence = 406 Nucleotides)

CAAGGGTGT CTTGCCAGA TCACTGTAA TGATTGCTT GTGGGAGCT CCGTGGATGA GGCTCTGGG CTGGTCCGAT
 TAAGAAAACC AAGAGAGGCC GGGCAOGGT ACTCACGCT GTAATCCAG CACTTTGGGA GGCAGGAGTG GCGGATCATG
 AGGTCAAGAG ATGAGACCA TCTGGCTAA CACAGTGAAA CCGGTCTCT ACTAAAAATA CAAAAAATT AGCTGGGCAT
 GGTGGCACGC GATGTGTAGT CCAGCTACTA GAGAGGCTAA GGCAGGTGAA TCGCTTGAAT CCAGGAGGTG GGGGTTTCAA
 TGAGNCCGAG ATGTACCAC TGCACTCCAG CTTGGGCAA CAGAGTANGA CTTGTAAACC CCAACCAAC CCNCCAACCC
 CCGGCC

SEQ ID NO:258: (Length of Sequence = 157 Nucleotides)

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TTCATGCTCA TGTAACCTTC TTAATAGTGC CTGTCTGCT GGGTTTGTAG CTGTAAGAGT TCTGCAAACT GGCCCTATAA
 AAATATTGAT GCTGTCCATT AAAATGAATC TCTCTCTCTC ACTCAGTCTC TCTCTCTGTC TGTCTCTCTT TCTTCTCTCT
 CCTGCCATGT GTGTGCTCT CTCTACTCCT CTGATTTTGN CCTCTCTCTC TATTCTGCTA CTCTCTCTCC TCTCCTCG

SEQ ID NO:246: (Length of Sequence = 269 Nucleotides)

GGTTTCACCA GCGTTTAATG TGCTCTGATG TTGACCGTCC CTCINAGINT TCTGGGGAGG AGGGGGTGGG GGGGAGGGTC
 AGGAAAGCAG GCTCAGCTTC CAGGGTCAGG GAGTGTGGG CCCAGAGGGG CTGTCACAGT GGATGCACCC TGCCCCCTCC
 CTCGCCAGAC CCGAGGGTAG GGCAGAGGCA CCTCCTCGNC AGCCINTGGG CTGCACCCAC AGGGAATNGA GGGGAGGGGC
 ACCATTACCA CTGGACCCAC CAAAGACCC

SEQ ID NO:247: (Length of Sequence = 297 Nucleotides)

CTATTCAAAG TTTACTGACC TCCCCAGCCA GGCAGGCCAA CCCTTCCGAG CAGGGGAAAT GTCCATCTAG CTGCCCTCTG
 CTGGGTTCGA GCCTATGCCA TGAGAGGGTA CTGGAAGCAG GAGGGAGCCC TGGCTAGGGC AGGCCTTAAA CGCAAGGGAA
 GCTGAGCAGA GATCTGCACA CTCAACCCCA TTGATATTCT TCTCTCTCTC CAGTCATGGC CAGCGTGTG GTGACTAGAC
 CGGTGCCAAT AGTCCGGTTG CCATCTCGCA GGGTGAAAAG ATGGCCTTTC TCTTAAG

SEQ ID NO:248: (Length of Sequence = 281 Nucleotides)

ACAACAAGCA CACCAACTAT ACCATGGAGC ACATCCGGT GGGCTGGGAG CAGCTGCTCA CCACCATTC CCGCACCATC
 AACGAGGTGG AGAACCAGAT CCTCACCOCG GACGCCAAGG GCATCAGCCA GGAGCAGATG CAGGAGTTC GGGCGTCCCT
 CAACCACTTC GACAAGGATC ATGGCGGGGC GCTGGGGCCC GAGGAGTTC AGGCCTGCCT CATCAGCCTG GGCTACGACG
 TGGAGANCGA CCGGCAGGGT GAGGNOGAAG TTCAACCGCA T

SEQ ID NO:249: (Length of Sequence = 383 Nucleotides)

AGCGCATCCA CACCGGGGAG CGGCCCTACC CTGCTCCTA CTGTGGCAGG AGCTTCCGCT ACAACAGAC ACTCAAGNC
 CACCTCCGTT CAGGCCACAA TGGAGGCTGT GGGGGTGATA GTGACCCATC AGGTCAGCCA CCCAACCAC CAGGTCCCTT
 CATAACTGGG CTTGAAACTT CTGGCCTGGG TGTAACACT GAAGGCTCTAG AGACCAACCA GTGGTATTGG GGAAGGGAGT
 CGAGGGGGAG TTTTGTAAAT CCAATCTCT GTGNTTCAT GCTTTGTATA TGCTCAGAC AGGGCACAAT AATCCAAGAG
 AAGGTCGTG AGCCCNATC CAACCCAC AGTAATTATA ATCTTGGCAC ATCAATGGAA TTT

SEQ ID NO:250: (Length of Sequence = 397 Nucleotides)

GIATCCTACG TTACAACAAT AATATCATGG GAGAAATAGA AATAGCCTAG TTTGCTTCCA ATAGAACTG CTTTTAACAT
 GGGCTGTATA TAAAAATATT AAAGAGAAAC AAACTGTAC ATTTCCTCAT TGCTCCGCTA CAGACAACCC ATGTCATAAC
 CTTGTTGCAA ATATTTTCTT CCTATAGCAG TAAGTACAGC ATTAGAAGGT GATTAGAGAG TCTGTTGATG AAACACAAAT
 GIATGTTTTT ATTGATTTTT ACTTTAGAAC ACTACAGAGT TCCTGGGACC GGGGTGAANG GCATTTAGCT GGGGTGGTTT
 GTGTGGGGGT TAAATACCTT CCCACTTGCA AGTGACTTGC CTGTCCTCCG TGCGGGAATC CTGTTCCTTG GGTGGGA

SEQ ID NO:251: (Length of Sequence = 276 Nucleotides)

GGCCATAAAA GAAAGAGCCT GTTACCTATC CATAAACCCC CAAAAGGATG AGACGCTAGA GACAGAGAAA GCTCAGTACT
 ACCTGCCTGA TGGCAGCACC ATTGAGATTG GTCCCTNCCG ATTCCGGGNC CCTGAGTTGC TCTTCAGGNC NGATTTGATT
 GGAGAGNGA GTNAAGGCAT CCACGAGGTC CTGGTGTTCG CCATTACAGAA GTCANGACAT GGACCTGCGG CGCAGCCTTT
 TCTTAACAT TGTCTCTCA GGGAGGGTTC TACCCT

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TGACCCCACT GTCCCATAT ACAAGGGTTK GGGGGCAAGA GCATGTGGCT ACTCCAGCA AGGGRAAAT GGGAGGAGCA
GTAGAAA

SEQ ID NO:239: (Length of Sequence = 285 Nucleotides)

ATTATTAGIT TATGGTGCTT TAAACCTATC AAAATAGTTG TAAGTAAATG GATTTCTTGT NCTCCCAATA ACAATTCTCT
GAGCTAGGAT AGATGTCTTT CTGGCCATTT TACAGGTGAT GACACTGACA TAGGGACTGA GTGGGTAGCT TAAGTNCAT
GGTTACCAGG AGCAGGACCN ACGTTTCTTG NCTCCAGTC TCATCTGTT TTCCACTGAC CAGGTGGTT GCTCCCTTG
AAAGCAGTCC CTGAGAGTTG ACTTAGAAGT TCAGGNGAA GAGT

SEQ ID NO:240: (Length of Sequence = 349 Nucleotides)

TTTTGCCATG TTGGACAGGC TGATCTCAA CTCTGGCCT CAAATATCT GCCAGCTTG GMCTCCCAA GYGCTGGGAT
TACAGATRTG AGCCACTGCA CCCAGCCTGA CATGCCATAG TTTCAGCAIT TTCTTGGSCA ATGATCCAAG CTGAAGGCTG
GTCTGAGGGA TCTSAAGAAG CGTATGAGTT GGAAGAGAGG GACAGAAAGG AAGAAGACAT GTGAAGAGAG AAAAGGAAGG
AAGCTAGCAG AGGAATGCCC TCCAATAGAG ACTGCTGCCT GAAGCTCAGC CCTCTGAAG ATAGGTAGGC CAGGCTGGCT
TAGCTGAGGC AGTGGGTTAG ACCAGCCCT

SEQ ID NO:241: (Length of Sequence = 233 Nucleotides)

GTGACGCGT CTGCCCTCAT CTTTAAATGG COGGTGCGT ACAGTTAGTG GACAGACGGG GGATGGGACA CAGCAGGGGT
GAAACAGGGC AGTCACAGCC GGGGCCGGG ATCTGGAAGC GGGGGCGGTC CTCCCCCTGG AAACACCGTN TCTGGAAGGA
CACCCCTAGG ATCCCCTGAC CTCARGGTGC CACCACACG GCCTGGTGT TCTGGGAGGC COGGCTKGAG TGA

SEQ ID NO:242: (Length of Sequence = 372 Nucleotides)

ATATGTACTA CATTTGGTGG AATACGCATG TACAATCTT CAAAATAGT AAAGAGCAA ACAACAAAA AATAGTAGAA
GCACTGGAGA AATACACTAT GGCATAAACT AGTTACGGGT GGGATGTAC ATGGACCATA TCTACACTCT GTGGCAACCT
TCTTACCTGA CTCCAAGGA TCAGATAATC AAACAGGAAA TTATGGTAGG AAATCAGAAA ATTGAAGTAT GCATTCATAT
CCTAAGCATT TTAATTTAGC TCAAAATATA AAAATATCA TCAGTTAGCC AAGCTTTTEN GATGAGAGAT CATAGCCTCC
TCTTTGATAG GGGGTTCTT GGGTTTCTT GATTTCAIT TTCAAGTTT TT

SEQ ID NO:243: (Length of Sequence = 256 Nucleotides)

CTCACACATT CATACCAAG GAAGAGGCAA ACACACTCAA GTCCAGAGTT CCCAGTGGTG COGCCCAGAC CTACTGTCCC
GGGGGTGTTA TGGCTGTCCC TCGCTTCCC CAGAGCAGCC AGGACAGCCT GCACCGNCTN CCAGACTCTC GCAGGAAGGG
GAGCTCTGCC CTGGGGAGGA AACTNACAGG CTGGGAGACA AGACTCCCAT CGCAGGGACA TGCACAGCAG CAGCCACAGC
CCCGGGGACG GGGCAT

SEQ ID NO:244: (Length of Sequence = 220 Nucleotides)

CAAATGGCAG TTCTCGAGAA TCGACGAGGA ACTTAAATCT GGAATCAGGG TTTCAGTGG GTCTCGACT CCCACCACC
CGCCCTCCG NCTGTCTCGC CGCCAGNGT GACCTCCAG CGAAGGAATC TTCTTGGAT GGGTGACCT TGCCAANAGG
TGTGGCACCT GGNNGACTAG GAGGCGCTC CANACTAAG GCGCTCANT GCGGTTCTT

SEQ ID NO:245: (Length of Sequence = 239 Nucleotides)

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GGGAGTTTTT AGATGCCAAT ACATTGCAGA TAACCATATT GGTTACATTA GGGGAATGAG CATGGGATAG GTGCTCCCA
GTTGGTAGGA TAGCATGAGG AGGTTTCAAA AGTAACCSCT TTAAGGGTAA TGTCCAGTAT TTGCTAAGTA ACCAAGGT

SEQ ID NO:232: (Length of Sequence = 272 Nucleotides)

GGGGCTGCAG ACTGAGTTAT TTTATTTCCG TATTTCCAGT TTGAAGCTAC TATCATGGGC GTTTAGAGTT ATACAAATGA
CACTTACAAA AAATAAAGA CCAAGACACC CAGAGTGAGA TGCATGTTGG GGACGGGGGA GGCTGGCAGC AGGGGGGGCC
CGGCGGYTCA CCCAGGGCT CCGGAGGGG CGACGCTGG CTTCATCCAC CCGGAGGCC CAGGGAGCAC CAATCACAGC
AGGGGCTCTG GCCCAGGTGT CGGCAGCCCA GG

SEQ ID NO:233: (Length of Sequence = 364 Nucleotides)

ATTTTACAGT TTTATTTTAA AATCATTTAC ACATATTCAT ACAAAGAAAA ATAAATTTCA GGATGGAATC CTGGGGACCA
TGGTAGTTTA AAAAAAAAAA TCTCTCTGAT CATTAGCTAC TAAAGACANG GCAAGAGGCT TAGCAGTCAT TTCTGGGGGT
TAGTGTATCT CCCCATGCAG GGGACAAC TGAGAATCC AAGCTGCTCC CTCATCTTCC TTGATCTAG ATGGGGGAAG
GGGATTTTCC AATGCTCTCC CTTAGAAACA TTTCAGAAG TACAGCAAAG GCTTATGGTA AACTGGGAAC CTATTTGCTA
GAAATCTGGC AAGATTGCAC TTTCTGAACC CAATTTTCT ATAA

SEQ ID NO:234: (Length of Sequence = 217 Nucleotides)

GGCCAGGAGC CAGAGGGGCC CGGGGCCACC CTTGCCGGG AAGTGATGA CCAGAGTCCA GACAGTGTCC CAGAGAGGCC
GCGGCCGCA GACCGGAGG TCTGCTGCC CTGCTGGAC GCTTCGCCAC TCCAGGGAG GACGGCCTGC CCGTGGCTGC
AGGAGGCCAC GCGGCTCATC CAGGAGGAAT TTGCCTTGA TGGCTACCTG GACAATG

SEQ ID NO:235: (Length of Sequence = 221 Nucleotides)

AACITTAAG TTAGGATTTT AAAATATTTG TAACITGGCTA AATTTTAAAG TCGTGACAAA TAATTACTTA GGTTCAGAAA
TATACACACA CTACTCTTT AGCCAGTTTC TTCAAGGTT TTAGTGTCCC ATCAGATATC TAGCCATTTK CCTTTGCAAA
TTACATACCT TCTTAAGAGT GTATTTTAA GATTATTACT TATGCTTTAT GATGATATAG T

SEQ ID NO:236: (Length of Sequence = 221 Nucleotides)

ATAAATGGGT TTCTCACTCC TTAGGGACAC GATTGGAAAC AATACATCCC ATGAACACAG GTGAATGTCC CTGGTTATCC
CTGAGCTGGG CAGTTTCA CAATCANTTT TNCCTGAGG CCAAAGTCTG TGGTTTGATC ATCTTAGCAG CTTCAGAAC
AGAAAGTAGG TTTACTTTGT CTCCAAANTC TNATCTCGG TGCTCAAAGA AGAATGACCT G

SEQ ID NO:237: (Length of Sequence = 251 Nucleotides)

GACATCTTC TAAGATTCTC TGTGGGAAAA TGAATGTCAA TANAATGCGG GTTCTGGGC CATGCTCTT ACTTTCAATT
TTTGATTACA AATTTCTCTT GACGCACACA ATTATGTCTG CTAATCTCT TCTTCTAGA GAGAGAACT GTGCTCTTC
AGTGTGCTG CCATAAGGG GTTTGGGAA TCGATGTAA AAGTCCAGG TTCTAAATTA ACTAAATGTG TACAGAAATG
AACGTGTAAG T

SEQ ID NO:238: (Length of Sequence = 327 Nucleotides)

GTTCGTGGCT GTCACAATAA TGCTGTGATA ATGCTGTGGT TTCCAGCAG GGAGGTGGGA GCGGGGAGGG GGCTGCAGCC
TGATGAGAGC CAGCTGAAGG AAGAGCTGCC TCTCCCTTCC TAAGCCCTT CCAAGGTCT GCCCACC GC CCAAAACCAA
GACCACTCCG AACAAAGTGA GGATGTGGAT GCTCTGCTG GGTCCGCTGT TCCGAGAGG GAAAGAAAG GTAGCTGCAC

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SEQ ID NO:226: (Length of Sequence = 440 Nucleotides)

GTGCCTTAAG GAGAGAGATT GTGTCTCTCC TCTCTCAGGG GTGATAACTC AGGAAGCCTC TGGGTGSSGA AGACCATCAG
 TTCTTTTGTC TTAGGTTTCT TTTCCTGTCC CTCTTCCATC CCCAAGATGT GACCCCATAA AAATTTTTC TGAGTTGGCC
 AGGCATGGTG GCTCAGGCT GTAATCCCAA CACTTTGGGA GGCTGAGGCG GGCGGATCAC GAGGTCAGGA GTTCGAGACC
 AGCCTGACCA ACATGGTGAA AACCCCATCT CTAATAAGGA TACAAAAAT AGCCGGGTGT GTTGGCACAC ACCAGTAAGT
 CCCAGCTGCT CAGGAGGCTG AGGCAGGAGA TTTGCTTGAA CCTGGGAGGC AGAGGTTGCA AGTTAGGCCG GGATTGCGCC
 GTTTGTACTC CAGCCTGGGC AAGCAGAGCA AGACCATCTA

SEQ ID NO:227: (Length of Sequence = 426 Nucleotides)

GACCAAGAAG TTCCGGTTG AGGAGCCCGT GGTTCGTGCT GACCTGGAGC ACCAGACAGN CCACGGCAG TGGACTCAGC
 AGCACCTGGA TGCCGCTGAC CTGCGCATGT YTGCCATGGC CCCACACCG CCCAGGGTG AGGTTGAAGC CGACTGCTG
 GAGTCAATG TCCGGGGGCC TGATGGCTTC ACCCGCTCA TGATCGCCTC CTGCAGCGGG GGCGGCTGG AGACGGGCAA
 CAGCGAGGAA GAGGAGGAG CGCCGGCGCT CATCTCGAC TTCTCTACC AGGGCGGCAC TTGCCACAAC CAGACAGACC
 GCACGGGCGA GACCGCTTTG CACCTGGCCG CCGTTACTTA CGCTCTGATG CGCAAGGGC TCTTGAGGCC AGCGAAGATG
 CCAACATCAG GCAACATGGG CGAAC

SEQ ID NO:228: (Length of Sequence = 278 Nucleotides)

CAGGACCAGG AGAAGATCCT GGAAGATGCA GTGGATGAGT GGACGGGCTT TAACAACAAG GTTAAAAAGG CCACTGAGAT
 TGTTTTGAAG AACCAACAGC AAAACACTGA CAAGGTACAT AAATACAGAT TGGACATTTT AGGGTAAAT CACTGTATTT
 CCTACTTGCT TGTAGGAAAC CGAGTAAAGT GGAAAGCTG TCTGATCAT ATGGCATGCA CACCAGACTG CAAAAGGNGC
 TCCACACTAT TTAACAGGAC TGTGGCAAAA TAGCTTAA

SEQ ID NO:229: (Length of Sequence = 425 Nucleotides)

TTTTTGTTCC CAAGCCTTTG TGACTGACTT TAAATCCTCT CACCTGCAGA ACAGAGATGG CTTCAAAGTG GGGAGTGAGG
 GAGTGAGCGA GGACCTGGG CTGAGACCTG TTTTCTTCC ATTCTGCTG TGGCTTCCA CAGCTCCCTG GTTCCACACC
 AGGCCCTGCT CTGCGCAGA AAATGGATTC CCAGGCCACA GAGCTGTGAG GCCTTTGACT TTGCAGAGAC CAAGCACCCC
 AGAGGCTGTG CGACASGGCT AGTCCCTGGT GGGCCCGTCT GGGCATGGG GGGCAGGGAG ACTKGGAGAT GGGGAGGGCG
 TTGAGAATCC GGGGGTCTT GGATACTTGA CAAATGGCT CAGGTCTTAG CTYTGGYTGC CCCACTGATT GTGTGCTTG
 GCAAGGTGCA AGTYTTCGGC TGTTT

SEQ ID NO:230: (Length of Sequence = 382 Nucleotides)

TTGGAGGATG TGCTGCCCCT CTTGCAGCAG GCGACGAGC TGACAGGGG TGATGAGCAA GGCAAGCGGG AGGGCTTCCA
 GCTGCTGCTC AACCAACAGC TGGTGATGG AAGCCGGCAG GACTTCTCTT GGCGCTGGC CGAGCCTAC AGTGACATGT
 GTGAGCTCAC TGAGGAGGTG AGCCAGAAGA AGTCATATGC CCTAGATGGA AAAGAAGAAG CAGAGGCTGC TCTGGAGAAG
 GGGGATGAGA GTTCTGACTG TCACCTGTGG TATGCGGTGC TTTGTGGTCA GCTGGCTGAG CATGAGAGCA TCCAGAGGCG
 CATCCAGAGT KGCTTTAGCT TCAAAGGAGC ATKTGACAA AGCCATTCTT CTTAGCCAG GA

SEQ ID NO:231: (Length of Sequence = 398 Nucleotides)

GAGGCTGGAG AATCGYTTGA ACCCAGGAG CGGAGGTGC AGTGAGCCGA GATGGGCGCA TTGACTTCCA GCCTGGGCCA
 GAGCAAGGTT CCTTCTCAA AAACCTGGAA ATCTGTGGG AAGTAGGGGG AGGGCAAGGT TAAACCTAT GCAGGTGTGT
 CAATTAGACT TGTTCCACT TGAGAACCTG AATTTTCAT GTAATTGAAA TGTTCAGAA CAAGTCTGGC AGTTTCATAA

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TTTTTGT TTTTAATAT TTTTGATATT CTCITTTGCAT TGAAATGGTA TAAATGAATC CATTTAAAAA GTGGTTAAGG
ATTTGTTTAG CTGGGTGAT AATAATTTTT AAAGTTGCAC ATTGCCCAAG GCTTTTTTTG TGTGTTTTTA TGTGTGTTTG
TACATTGAA AAATATTCTT TGAATAACCT TGCAGTACTA TATTTCAATT TCTTTATAAA TTAAAGTGCA TTTTAACTCA
TAATGTACA CTATAATATA AGCCTAAGTT TTTATTCATA AGTTTATTTG ANGTTCTGAT CGGTCCOCTT CAGAAATCTT
TTTATATTAT CCTCAAGTT ACTTCTTAT TTATATTGTA TGTGCAITTT ATOCATTAAT GT

SEQ ID NO:221: (Length of Sequence = 314 Nucleotides)

GACTTTGGTT TATTTAAAAA ACAAGCCAAA AAAAAA AAAAACCACA ACITTTATATA CAAAGTCAA CTGAAACCAC
GGWTTATGGA AAGAGGCAAG AWTTATGGGT AACAGGGGAG AAGGCTGGGC CAGAGCCAAT ACCACATTCT GAACACAGGA
GCCACGGGAA AGAGGTGCTG GTTCTTCTG GCAAGACCGG GGTGACTGGA ACGCAGTGGT CCTACTGGCA AACCCAGCCC
AACACTGAGC TCTTCTAGC ATGGACTCCA TTCCCGTGAT TGGCCAAGGG AGACCCCTCC CCCAGGAGGC CTGT

SEQ ID NO:222: (Length of Sequence = 342 Nucleotides)

TTCTTCTCT GCGGCGGCAC GTCCGACGCA GCGTCTTCG CCCCGTCTC AACTTTGAGC TGGAGGAGAA GCACTTTGG
CAGTGGCCGC GGGGTGGGAA TCCCGCTTCT CCGGCGCAG AGTAGGCTCG CAAGTCGCTG GGGTTAGGTG GGGCAAGAGT
TTCCGCGGCG CATCAGCGCT TGCTTCGGAC TGTTTCAAC GTGTTTCCAG CGAGCTGGGA GCGGGGGTTG TGA CTGCGAG
TGCTTGGGG GAGGGGACT TGTTTTCTT TTCTCTAGA GACCTCGCT TTCAACTGGA TCAAACGTTG TCGAAAGGAT
GTAAATAGGC AAGAGCAAAC TG

SEQ ID NO:223: (Length of Sequence = 376 Nucleotides)

GTGATGGCTG CCTTGAGGGG GACCATCATG TCGGAGACGC ATTTGGTGAG GTCTCACCCC ACAGCCCATG CCCAGCCTCC
TGCAGACTCA GGTATCCAG CTGGTCGATG GCTCTTTGCA TACCTGGTGC CTCTCTCT CTGGCTTGGC AGGCTTCTCT
GGGGCTTCT CAGATGACTC TTTTGCCCTC TTCTCTGCT TGGCTAATC CTGGCCAGC TCTGAACGTG CCTCCTTGGC
TCCCTCTCT ACCACCTCCT CCCGTTTGGC CAACITGCTC ACGGCCGTCT TGGTAGTGGC TTTGAGGCTC TCCTTCTAT
CAGCCCGCTG TTTGATTTTG CTGGCTTGA GGTGGTAAG GCACAGCCCC AAGAAG

SEQ ID NO:224: (Length of Sequence = 445 Nucleotides)

GTGATAGAC ATTTGGCAITG GGGTGTCTC CACCTTTTGG CTGTATGAA TAATATTGCT ATGAACACTA ATGTACAATT
CTTTGCCTGA ACGTAAATGT TTTCAATTCT CTGGGTATT TATCTAGAAA TGAAATTGCT GTATGTTAAC CCTTTGTTA
ACCTCTTGAG GAACTGGCAG ACTTTTCCAA AGCAGCTGCA CCATTTTAAA TTCTAACCAG CAGTGTTTGA GGGTTCCAAT
TTCTCTATAT CCTTGGTAAC ACTTGTATC TGCCCTTTTG GTTAGAGACA TCCTAGTGAG TGTGAAGTGG CATCTCACTG
TGGTTTIGAT GTGCATTTCC CTGATAGCTA ATTTGTGGA TCCTTTTTC TTTAGTGA ATGAAATATC TGGTAGTCTC
GTATGCCAAA CTAAAGCTAA AATTAAAATG ACTCTGCATG ATGA

SEQ ID NO:225: (Length of Sequence = 403 Nucleotides)

TGCTCTGGG ACAGTTTCCC GGGCAGCTCC TGGCCAGCTT CCAGCCAGA GTCTCAAGT CCAGGGCACC TTGGGCCAG
CGCAGGAGA ATCCGAGGTG GTCCTGGCTC TACCTGGGC CTCTACTCC CCAGCACCCC TGGAGGAGGC AGGGGCTCCC
CGCCGCCGAG GCTGCCTGCC CTAGGCCAC CTCGTGATG TGCTCATGG GCCACCTGC CTCTGGGCC CTCCTCTGC
CTAGGGGAGC TGGGCCAGGC ACTAGCCTTT GCCAGGGAG GTGGGCTCA GGCTGCCAG GTGCCTGCAC CCCAGCCGG
CTTCTCTGGG GCTTCCCGT CGTCAAGCCT ATATCTGTC TGTCCCCACC CCAGCTGTCC CTGTCCAGGG GACTGGCATA
AAA

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CAGTTTTGGT GGAAGAGGGG GGCCCTAGAA ACCCTGTAGC GCAATGGGT TGGGCGCCCC AAAGGTTAAG TTTGAACCCG
AAGAGCAAAG GAAGAGGCCA TCATCATAAG TGGAGGATTA GGATTAGGAT

SEQ ID NO:213: (Length of Sequence = 302 Nucleotides)

ATCTGTGGAA TAATCTGGG GCTAACACGG ATAACTCAGT ATAAGAACCA CCCAGTTGAT GTCTATTGTG GCTTTTTAAT
AGGAGGAGGA ATTGCACTGT ACTTGGGCTT GTATGCTGTG GGAATTTCC TGGCCANTGA TGAGAGTATG TTTGAGCACA
GAGACGCCCT CAGGTCTCTT GACAGACCTC AATCAAGATC CCAACCGACT TTTTATCTGC TAAAAATGGG TAGCAGCAGT
GTATGGGAAT TTCTCTATAC AGAAGGGCAT CCTCAAACC GGAAACCACA GAGATGCTAG GT

SEQ ID NO:214: (Length of Sequence = 354 Nucleotides)

ATGGATGAGT GGGCACCCCG CACAGGGCTG CAGGGTGGAA AACGCTCGAC GGCCAGGTGG TGACTTGGGG GCAGAGAGCG
CAGTGTGNTA GGGGAGGAGA GGTGGTGTCC CTGCTGCCTG GGAGCCAGCC TGCTGTNCT GTGGGCAGAG CAAGGCACTT
TCTGCTGCCG GTGCTTCAG GGCCTAAGCA GCGCTGCAC ACTCACCAGC GCAAGGCTCC TCTGCAGGGA ACGAGGGCTG
CTACCCATTT CACAGATGAG GGCAAGCAAG GACTTGCCCA GGGTTCGCCA NAGCAAGTGC GTAAACAGGC CTGAGAAGAG
NGCCAGTGAG CTCATCTGA GTTAATTATG GGCT

SEQ ID NO:215: (Length of Sequence = 260 Nucleotides)

TGGTTCAAAG TCTAGGCCCT CTNAGAGCT GGCTGATTCA GCTTGCCAAC AGTGACATCA GGGTGAGGCT TCCCTGTGCC
ACAGCATTAG CTGGAATAT CCTCATGGTC ACAAGATGGC TGCCAGTGGC CGTCAGGGTG TGTGCTTCTT GTTCACATC
CAGTGGAGA GTGACAGCCT GCTCCCTTGA GCTCTGTGAC ACCANTGTGA AGGTGCCANG AACTTACTAG CAGGNCITTC
CTCATGACCC ATTCAACAGG

SEQ ID NO:216: (Length of Sequence = 232 Nucleotides)

CTTGACAAG ATCTGGGATA ATTCTCTGGA TTACCTGGCA GAGACTTTTK TTCTCTTCCC TTACTGTCTC CCAATAAAC
AGTCTCTCAC TCTGTTGIGA GCCACCTGAA GCTGTGATAT TTCCAACGAC TGTAGGAGGA AAAAAATTAG GGGAGAGAGG
AAAACAAAAC CAACCAACCC CTAANATCAT TTTTATTATG TACATAACGA CCTCATTCTC CTGTATATGC GG

SEQ ID NO:218: (Length of Sequence = 219 Nucleotides)

CTGCAACCAT CCATACCTTT TNCOCGTGGC TGCTATGGAG TCCCCAAAC TCCCCAGTGG GGCCTATGAG GGTGGGGCAC
TTATTANGIN GTCTGGGAAG CTCATGCTGC TCCAGAAGAT GCTGCGAAGC TGAAAGGAGC AAGGACACCG AGTGCTCAAT
NTTCTCGCAG ATGACCAANA TGTAGCCTT GCTTGAGGGC TTTCTTAGNC TATGAGGCT

SEQ ID NO:219: (Length of Sequence = 390 Nucleotides)

GATAGGTAGC AGAGACCAAG GGCAGGGTG CTTGAGATGA GCAAGAGAAC CCAGTGAAC CAGATACCCC AGGTGGGCCG
GAGGGACCCC AGACCTTCAG AGGGCTGCCC TGGTGTCTC CACAGTGCAG TCCCTCTGTA TTCCAGAGT GGGATCGGGG
CTTTCAGCCC ACCCTGATGC CTGCCCTCCA GGATGGCTGG TTTAGTCTGG GTCCATGTCC CAGACCCCTC TATCTGTCTC
CAGGACAGCA GGACTTCAGG TCTTTCCTGG GGGTGGATAT AGGAGAAAAT TTCTGCCTGG CACACACCTG GGCTCCAACC
ACTTGCCAAG TGATTCACTC TTAGGCCGAG GGGGAACACA ATGACTATCA TTAGTGATGC AGACCTGGCT

SEQ ID NO:220: (Length of Sequence = 382 Nucleotides)

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CTTTACTGTG GGTGTGGGTG TCACTGTAC TGCCACAGCC ACTNGGAGGG ACACACAGCT TTAACCCCTR TTTGCTTAGG
NGAAGGGTGG GGGCATTGAG GGTATATAAA CTAATATAT ACACAGAAGG TOCTAGGKAG AAAGCCACCC TGAGCACACA
TGCTTAGGCA CA

SEQ ID NO:207: (Length of Sequence = 215 Nucleotides)

AAGGCAATTA GAAGATTAT TGAATATTGG TTAAAGTAG ATTGACAATG ACATTAAAGA ATAAAGTGTA ATTTATTTGG
TGCTACTTTG TGAATGCTTC CAAGTACAAA TCATCTCACA ATACCATATA CAACATACIT TCAATCACA CTCAAATATA
AAATAACCTA CAAATCACA TTGCTATAAT CAATATACAA TAATGTATT TTAA

SEQ ID NO:208: (Length of Sequence = 444 Nucleotides)

GGAGTTCTCT TGTCACGGA GAGCAGTGT GCAGTGTATG GAATGCTAAA TCTTACCCCA AAGGGCAAGC AGGCTCCAGG
TGGCCATGAG CTGAGTTGTG ACTTCTGGGA ACTAATTGGG TTGGCCCTG CTGGAGGAGC TGACAACCTG ATCAATGAGG
AGTCTGACGT TGATGTCCAG CTCACAACA GACACATGAT GATCCGAGGA GAAACATGT CCAAATCCT AAAAGCACGA
TCCATGGTCA CCAGTGCTT TAGAGATCAC TTCTTTGATA GGGGGTACTA TGAAGTTACT CCTCCACAT TAGTGCAAAC
ACAAGTAGAA GGTGGGTGCC ACATCTTCA AGCTTTGACT ATTTTGGGGG AAGAGGCATT TTGACTCAAT CCTCTCAGTT
GTACTTGAGA CCTTCTCCC AGCCTGGGAG ATGTTTTTGT TATT

SEQ ID NO:209: (Length of Sequence = 338 Nucleotides)

GCAGTCACT TGAGGTGAG AGTTGAGAT CAGCTATAT ATGCAAGTAC ACACACAGGC ACTCGCAGC ATGCATGCTC
ATGCAACACA CATGTACCT CTACATGTAC AGCTCACATA TGCTCCATA CACATGTGCA TGCTCAGCCA TACACCAGCC
ACACACAAGT ACTCATAGC ATACATGGCC ACACACAAAG TACACACAG TACACCATAT GCATATGTAT GCATCATAC
ACTCATACAT ATGTGCCCCC TCAGAGAAGT ACACAAGTGC ATGCGCATCA CACATGCATA CGTGCTCATG CATACACAG
GGACATTTCA TACACAG

SEQ ID NO:210: (Length of Sequence = 371 Nucleotides)

GAGGAAGTAG AGCCINAGGA GGCTGAAGAA GGCATCTCTG AGCAACCTG CCCAGCTTGA CACAGAGGTG GTGGAAGACT
CCTTGAGGCA AGCGTAAAG TCAGCATGCT GCAAGGGGAC TGTAGATTTA ATGATGCGTT TTCAAGGGTA CACACCAAAA
CAATATGTCA ACTTCCCTTT GGCCTGCAGT TTGTACAAA TCCTTAATTT TTCTGAATG AGCAAGCTTC TCTTAAAGA
TGCTCTCTAG TCATTTTGGG TCTCATGGCA GTAAGCCTCA TGTATACTA AGGGGGAGTC TTCCAGGTGT GACAATCAGG
TTATTTGAAA AACAAAACGT GGTTTTGGGA TCTGTTTGGG AGACTGGGGA T

SEQ ID NO:211: (Length of Sequence = 295 Nucleotides)

CCTCCCAACG TGTTGACATT ACAGGCGTGA GCACAGCAC CCAGCCCATC TAGCATAATG TTTTGATAG TTGTCAGCAG
ATAAATATTG AATGACAAA CTCAGATGGA GAAAAAGAA CAAATAACC TAGTTCTCAG AAAGATTAA TGAGCAAATG
GAAAAATGTC AAAAAGATTT ACAGACAGGG GCATCTTGA GTCACTGGAA TCACACAGGC CTTCCTCAG CTTGAGGGGC
TGCTTGAGG TGGGGTGGG GTTACACCTC CTCAGTGGG AGAGACTTGC CAAAT

SEQ ID NO:212: (Length of Sequence = 370 Nucleotides)

TGGCGATAT GAGGGGGGTG GGACTGGGCC CCGCGCTGCC CCCCGGCTT CCTATGTCA TTCTCGAGGA GGGGGGGATC
CGCGCATACT TCAGCTCGG TGCTGAGTGT CCGGCTGGG ATTTTACCAT CGAGTCGGG TATGGGGAGG CGCCCCGCC
ACGGAGAGCC TGGAAGCACT CCCACTCCT GAGGCTCGG GGGGGAGCCT GGAAATCGAT TTTAGGTTG TACAGTCGAG

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AAAGGTGGTG AAAGCCCTGC TTCTGGACAG TCCGGCTCCA ATCTGTATAC TGTTTGTCTG GGATGCTGTA CTCAAATACC
 TGCTGGTCCG AATGAGCGAT GACAAGGTTG TTGGTATTG GGGGCAATAG CCATAGCAGT CACTTGGGAA ATTGTAAGCA
 GGCACCGTGC AGTGAAGTTT TA

SEQ ID NO:201: (Length of Sequence = 273 Nucleotides)

ACTCCACGCT GATGAACCCG ACGTCCATTT CTCGAAGAAA TTCCTGAACG TCCTCATGAG TGGCCGCTCC CGCTCCTCCA
 GTGCTGAGTC CTTCGGGCTG TTCTCCTGCA TCATCAACGG GGAGGAGCAG GAGCAGACCC ACGGGGCCAT ATTCAGGTTT
 GTGCCTOGAC ACGAAGACGA ACTTTGAGCT GGAAGTGGAT GACCTCTGTC TAGTGGAGTC CAGGCCCCCA GACTACTTGT
 TACGAGGGCT ACAACATGTG CACTGGGTGC CCG

SEQ ID NO:202: (Length of Sequence = 436 Nucleotides)

GGACTCCAAC CCCCCAGGAG GCGAATGCT GAGCTTGCCA ATGGTGGCCT GGATGGAGCT GATGGGCACA TCCCCACCGA
 GGACCAGGTC CTGGGAGTCC TGAGGAAGGT GGTCTCTCTG GCTGATGCTT GCCTGGCCA AGGGTTTGCA TGGAGGAGGC
 ACACCATGGC GCTGCAGGAC CTGCTCCACG TGCTTCACCA CTGCCCTATA GCAGAACCIG AGGTGCAGCT TCCTCTGCAG
 CATGTGCTTT CTCTGCTGCC GCATGCGCCG CACCAGCTGA GGCAGCTCAG GGATTCCKTT CCCAGCCTCC ACCTCTGCA
 CAGCTGCATA GAGCAGTGCA AAGGCTCCCG TGCGGCCAC ACCAGAGCTG CAGTGCACAA TGATGGGCGT TTGCAGGGGC
 CGTGATGCAA GGTAATTGTC GTGCACCTCC TGGGTT

SEQ ID NO:203: (Length of Sequence = 336 Nucleotides)

CTGCATGTTT TGGGGACACT TACGCCAAGG CGCGCGTTC TCATTAGGAG CTGGGACCAG AAGTGAATAA GCCAGGTTCC
 TGTCTCAGGG AGCTCCATAG CAGGACTCAG AACCACACAC GGCCCTCTAG GCATTTTCTGA AGCTCTGTGC TTCAATTTTT
 TTGCTTTGCC TCTAGTTTTC CCTTTGCAGT ACCAATGCAG CCAGCCCATG TKTCCCTCT ATGTGGAATG TTAACGATAT
 TCCACTGTT TCTGGTGTCC TTCTGTAAAT CAGAGCTGCC GTGACCATTC CAGTTCAGGC ATCTGGTGG CCTGGCTTTC
 TCTGGGGCAT AGAGCT

SEQ ID NO:204: (Length of Sequence = 393 Nucleotides)

GGAATCAGAT GCTCAGGTGT CCAAGCAGGG ATAAGGACAG GCAAAATAAA TAACCCCCCA ACCCCCATCG TCACTCTGCT
 GCAACACGAC ACAAGGTTT AAAGATCTGG GCCCAAAGAC TCTGGGTCCC TTCAAGCAAG CTCAGGTGGA AGGAGGTTTC
 CCCACCCCC ACCAGGCCCTG TTGCCCCAG GTTGCCCTAG GATGGAGGCA GTTCAGACCC TGGGTCACTG AAGCTGATAG
 GAAGAACTNC GATATCAATG GCCTAAGCCT GCTGTTTGCC CAAGGGAGCC AAGGGCAAGA GCCAAAGGGC CAATTTAAAG
 GACGTGGACC TGGGGGGCCA GAGGAGGCAC CACAGCGAG GGGAGCCACG CCTGGGGCG GCAGGGCACA TGG

SEQ ID NO:205: (Length of Sequence = 390 Nucleotides)

GAGGAAGAGG ATGACCTGAG TGAGCTGCCA CGCTGGAGG ACATGGGACA ACCCCCGGCG GAGGAGGCTG AGCAGCCTGG
 GGCCCTGGCC CGAGAGTTCC TTGCTGCCAT GGAGCCGAG CCCGCCCGAG CCCCGGCCCG AGAAGAGTGG CTGGACATTC
 TGGGGAACGG GCTGTTGAGG AAGAAGACG TGGTCCAGG GCGCCAGGT TCAGCCGCC CGGTCAAGGG CCAGGTGGTC
 ACCGTACATC TNCAGACGTC GCTGGAGAAT GGCACACGGG TGCAGGAGGA GCGGAGCTG GTGTTCACTC TGGGTGACTG
 TNACTATC CAGGCCCTGG TTCTCAGTGT CCCACTCATG GACGTNGGGG AGACGGCCAT GGTCACTTCT

SEQ ID NO:206: (Length of Sequence = 172 Nucleotides)

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SEQ ID NO:193: (Length of Sequence = 397 Nucleotides)

GAAAAGACCA AGGAGATGGT GAAGACAGCA GAAGCCAGCA AGCAGCAACT GAAGGAGGAG CAGGGGAGGT CAGCAAGGAA
 CGGGAGAGTG GGGATGGAGA GGCTGAGGGA GACCAGAGNA CTGGAGGGTA CTATTTAGAA GAGGACACCC TCTCTGAAGG
 TTCAGGTGTA GCGTCCCTGG AGGTTGACTG TGCCAAAGAG GGCAATCCTC ACTCTTCTGA GATGGAAGAG GTAGCCCCAC
 AGCCACCTCA GCCAGAGGAG ATGGAGCCTG AGGGGCAGCC CAGTCCAGAC GGCTGTCTAT GCCCCTKTTT TCTTGGCCTG
 GGTTCGGGTG GGGCATGCGT CTAGCTTTCA CTCGTGTTCA GGTCCAACAG GTCCCGTTCT GTCCCTTTGG TGCCCCC

SEQ ID NO:194: (Length of Sequence = 225 Nucleotides)

GATTATGGC TTTCCTTTCA TAACATGIAT TTTTAAGTAT TTAATCTCTT AATGGCCCTC GTGTCTATTT TATACATCAT
 ATCTCTTAAT TCTCTAGATG GAACACTGAA GGACAGGAAT TAAGTAAGTG ACTGGCCATG CAAGGGTTGG AAATTTTACT
 GTATCCCTTC CTCRGTAGAA GTTATGTTAA ACATTCAAGC AACCACATAT CTAACAGAGG AGTTT

SEQ ID NO:195: (Length of Sequence = 294 Nucleotides)

ATTACTAGAT ATTTGTATGT TAAATTATGT GGGTTTTCAA ATTTGTGGAG AATAAGTAAT AGTGACATTA GTTTAAGGAC
 AGTGTTCAT CAGGGCATT ATTTTAATGAA TCTTATATTT AAATGCTCTG TTCAGGAATT CATGTGAATC TTCTTTTTTA
 TAGAGGACCC ACAGGCATGA NTTATTTACT CCTCCGGTGA TAGGTTCTCA CCTGTATGAA AGCGGAAGCA AATTCCAGGT
 TAGAACATTA TNCIAGTTAT GTAGGGGGGT ATAAAGTGTG TAAGTTTAAT ATTT

SEQ ID NO:196: (Length of Sequence = 233 Nucleotides)

TTATTTTCT CTAAATTTTA AAATAGAAGA CTTTAATGGA AAACATTTAG TACCATCATG TCAMCCTGAA TGCCAGCAAT
 ACCTCGACTT TTACACACGC AGGAAGCCTA GTAAAGCCCC CGTCAGTAGT ACACATTTCT CTATGGTCTT TCAACAGTTT
 TTCATATACA AAATTTTCTG CTATTTTTCG TTTTGCAAAC AGCAATAACT TTTGGGTTTC CCATATGACC ACC

SEQ ID NO:197: (Length of Sequence = 230 Nucleotides)

AAGATATCTA CCTGGAGTAG CTGTGAGGCC CCGCCCTCTG CTTCCCCCAG CCCTCAGGCC AGTGCCAGGA CAGCTGGCTG
 CTGACAGGAT GTGGCACTGC TTGAGGAGGG GCACCTGCCA CCGCCAGAGG ACAAGGAAGT GGGGGCCGCT GGCCAGGGTA
 GGGAAAGKTG GGGCAATGGG GAGAGGCAAA TGCAGTTTAT TGTAATATAT GGAATTAGAT TCATCTATGG

SEQ ID NO:198: (Length of Sequence = 118 Nucleotides)

TTCTCCCTGG GAAAGGCTG TTGCTGAAGT GGCCGGTTTT TTTAAGCATC GACATTTGCA TCCAAAGGTT CAAGCAGCCG
 CCTCAGGTT CARGGCTTC CACCTGATGG CTGCATT

SEQ ID NO:199: (Length of Sequence = 268 Nucleotides)

TAAATGATGG AGTTAAATGA TGTTGTCAGT GCCTATTATA AAACTACTC TTCCCTTCT CTATGAGTTC TACTTTGGTA
 AATATTATA TTAAACAGT TAGTAAACT AACACCACTA TTTCAATTCT CTTTGTGCA TAGTAAGTAA ATTTTGCTTT
 ACTTACTTTA TAAAAAATA CTTTACATTT TATAAGCAG GTTTTAGAAA AACGGTTTAC AAGAAAGTTT GCCTCCATTT
 CACTGCCAAT TTAAGCACAG GGGAAAAT

SEQ ID NO:200: (Length of Sequence = 422 Nucleotides)

CCAGTGAGTT TGTGAAAGC AACAGGGGTA NGACAGGTT CAGGAAGGAC ACAGACAGTG CCCTGTTTTA GGTTCCAAAT
 TTCTTCTTTT TAATGGGTGG TGGGAGCTGA GCAATGATGT CATTGGAAG GGGCAATGAC TTGTCAATNA TGCAGAACAT
 GTAGGCATCA TGGAGAAGGA TGTGCATCGG TCTCTTGGGA TGAAACTGA TGTGTGTGAT AGGAGTATCC CTTTGGAGCC

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TCAGCAGAAG GCTCTTGGGC GTGTGAGGGA GGGTCTTGGG GAACTAAGCG AAGGAGGCAA ACGCCAGGGC
CCCTTGCAGGCACC ATGTGCACCA CTT

SEQ ID NO:186: (Length of Sequence = 343 Nucleotides)

GTTCOAATAG CTGGTTTTAT TCTCAGCACA AAAGGGCCCT GTGTAAAAAC CAGAAGGATT TTGTAAAATA TCAAAATGAA
TATTGGCCCT GGAGGTTGGA AAGTGAAGCA AGGCTGGACA TAGAAAAAAA CTGATCAGTA GTTATTCAGG ATATTATTTA
GGATAAATGA AATAGGAACT TAGGGGCATC TCTTACTTTT CTACAGGTTT TTATCTGGGT CAATGAAGAA ATTGTGTTTA
TCTTGCTGCC CTTGCATCAG GTTTTTTGCA CTAATGGAAA AAAGCCGGCC GAAAAACAAA ACCCAATCCT TTCAGTCCTA
GCCTTTACAT CTTGCCCTTG CAA

SEQ ID NO:187: (Length of Sequence = 229 Nucleotides)

GGTGGGGCTC CACCCCTTCC ACGTCATCCG CATCAACAG ATGTGTGCTT GTGCTGGGGC TGACAGGCTN CAAACAGGCA
TGCGAGGTGC CTTTGGAAG CCCAGGGCA CTGTGGCCAG GGTTCACATT GGCCAAGTGA TCATGTCCAT CGCACCAG
CTGCAGAACA AGGAGCATGT GATTGAGGCC CTGCGCAGGG CCAAGTTCAA GTTCTCTGGC CGCCAGAAG

SEQ ID NO:188: (Length of Sequence = 284 Nucleotides)

CCAGCACTC AAATTCACCA CCTCGGACTC CTGCGACCGC ATCAAAGACG AATTTAGCT ACTGCAAGCT CAGTACCACA
GCCTCAAGCT CGAWTGTAC AAGTTGGCCA GTGAGAAGTC AGAGATGCAG CTTCACTATK TGATGTACTA CGAGAGTCC
TACGGCTTGA CCATCGAGAT GCACAAACAG GCTGAGACCG TCAAAGGCT GACGGGATTT GTGCCCAGGT CTTGCCCTAC
CTTCCCAAG GAGCAACCAG AGCAGGTTTT TGGGGGCCAT TGAG

SEQ ID NO:189: (Length of Sequence = 215 Nucleotides)

GGAAGGATGA GAAACAGATT TCTGCTCACT TCATGGGCTG RCCTRGRATT GACGATGGTR CAAACCAAG ATTATCCTCA
TGTAATTTAT GAAGATTATG GAACTGCAGC GCATGACATC GGGGACACCA CGAACAGAAG TAATGCAATC CCTTCCACAG
ACGTCACCTA TACAACCGGT CGGCACATC TCKGGGCTTA TGCTGCCGT GGTGC

SEQ ID NO:190: (Length of Sequence = 153 Nucleotides)

TTTCATATGG AAAGAGCTAG TACAATCACA TATTTGAAAG GAGAAACAAT AGGTACTGAA CCGGAGGGAA AGGGCGAGGG
TGAGTGTGCC AGCACCGGCC TGGTGAATCC ACGATTCCGT TTCCCATCCA AGGTAAGTT TCCCAAAATA CCG

SEQ ID NO:191: (Length of Sequence = 316 Nucleotides)

GTATTTATAC ATTATTTTAT ATATGTATAT TTAATTCAGA NGAAACGAAC ATTTGGGGGA CAGGAAGCAA GCAGGCCCGG
GGCTGCTTCC CTCCTGCCC ACCTCAGAGT CAGAGTTGGC ACATGACAAA TACCAAGCTC AGGGTGAAGA ACTGGGAGTT
AACTGGGAAG TAGGGKGGC TCTATGCACA CGCAGGCTTC TAAGGGTGCA CGGTATGGGC AGKKGTTTG CACTGGGAGG
CCCTATGTAC AGCTTGAAAG CTAGGGGTGA GATTAGCCCA GTGACTACAG GAACATACGT CAAAGTTGAG AGAAGA

SEQ ID NO:192: (Length of Sequence = 360 Nucleotides)

GTTGTTTTTG GTTATATGCA GCTTTGACT AGCATGTATT GTGTCTTTT CTCTCTATG AATAATTTTA TATTTATGC
TACTTCTTGA AAGTTTACTC TTTGATGCTC TAAGAGAACA GCCAGATGGT TTATATGAAT AANCTTTATC TGCAGGATGG
TGGATTGGTA AATNAGGAGA ATGTGTGTTG AGATATCAAG ATTTATGCTT GGGAACTAAA ATATATAATG CCAAATGTTG
TTTTGTCAAT TACTAGAGAA TTCTGTGCAA ACATATCATC TCTTCATG CTGCACACTT TGCTTTTGT TAAACAGCAG
GTAGTAGACA GACCAATACC AGTTTCGGT TAAGG

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TGGGGGACCA GCATGCTCC CAGCTGAGGG CGCGTCTTC CTCACCACT ACCGGTTCAT CTTACGGGG ATGCCCACGG
 ACCCCTGGT TGGGGAGCAG GTGGTGGTCC GTCCTTCCC GGTGGCTGG CTGACCAAGG AGAAGCGCAT CAMCKTCCAG
 ACCCCTGTGG ACCAGCTCTT GCAGGACGG CTCAGCTGC GCTCTGCAC ATTCCAGCTG CTGAAAATGG CCTTTGACGA
 GGAGGTGGGG TCTTACAGCG CCGAGCTCTT TCCGTAAGCA GCTGCATAAG CTGCGGTAC CCGCCGGACA ATCATGGCCA
 ACTTT

SEQ ID NO:180: (Length of Sequence = 213 Nucleotides)

GAGCATGCC CCGGAGTCCC CAAGATCCTG GTGGGAACC GCCTGCACCT GCGTTCAAG CGGCAGGTGC CCACGGAGCA
 GGCCAGGCC TACGCCGAGC GCCTGGNCGT GACCTTTTTT TAGGTGAGC CTCCTTGCAA TTCAACATC ACAGAGTCTG
 TCACGGAGCT GGCCAGGTTC GTCCTGCTG GGCATGGGAT GGACCGGCTC TTG

SEQ ID NO:181: (Length of Sequence = 219 Nucleotides)

AGCTTTATCA CATTATACAC AAACATAGAA AACAGTGTTC CAGAAGAGAA GCAAAGGCCA TTGGCTTCAA ATATTTATGC
 AACATGAAA ATGTCTCAG CCTTAAATG AGCACTGTG ACTGTGCAA CAGTGAGATA ACTAGTCAAT GGAAGAGTTC
 AACACTAGAG CATGTATCTC AGTCTGTCT CATATTGCTA TAAAGGGCTS CCTCAGACT

SEQ ID NO:182: (Length of Sequence = 451 Nucleotides)

GTCTTACTCT GTTACCCAGG CTGGAATGCA GTGGTGTGAT CATAGCTCAT TGCAACCTCT GCGCTCTAGG CTCAGTGTAT
 CCTCCACCT CAGCCTCCCG AGTAGCTGGG ACTACACGTA CATGCCACCA TGCCAGCTA ATTTTGTAT TTTTGGTAGA
 GACGGGGTTT TGCCATGTTG ACTAGGCTGG TCTTGAATC GTGAGCTCAA GTGATCTGCC TGCTCGGCC TCCCAAAGTG
 CTGGGATTAC AAGCGTAGT CATGGTGCCT GGCTAGTTT GCTCTTATTT TTTTCCATC TTTGAGTTT CTAGGCCACT
 GGGAACAGGC TGCAGAGCTC AGAGTCCACA GCTGTGAGGC TCCATGTTC ACCATCAAAA AATAAGGTGA CGAGAGTCTC
 GGGTTTCCCA GTGTACGGC AAGAGGGGT ACTGCTCAG GGTACACACA G

SEQ ID NO:183: (Length of Sequence = 444 Nucleotides)

CCAAGTTGAC CCGCGAACC ACCGAC-GGA AGAGTGAGTT CCTGAAACT CTGAAGGATG ACCGGAATGG AGACTTCTCA
 GAGAATAGAG ACTGTGACAA GCTGGAAGAT TTGGAGGACA ACAGCACACC TGAACCAAAG GAAATGGGG AGGAAGGCTG
 TCATCAAAAT GGTCTTGGCC TCCCTGTAGT GGAAGAAGGG GAGGTCTCT CACACTCTCT AGAAGCAGAG CACAGGTTAT
 TGAAGCTAT GGGTTGGCAG GAATATCCTG AAAATGATGA GAATTGCCTT CCGCTCACAG AGGATGAGCT CAAAGAGTTC
 CACATGAAGA CAGAGCAGCT GAGAAGAAAT GGCTTTGGGA AGAATGGCTT CTTCAGAGC CGCAGTTCCA GTCTGTCTC
 CCTTGGAGA GCACTTGCAA GCAGAGTTTG AGGTCAGCA CCGA

SEQ ID NO:184: (Length of Sequence = 399 Nucleotides)

GGCAGAAAGA GGAAGGAGAC AGTGCCAGGA GGAAGAAGGA AGGAGTCCCT TAGCTCTCTT CATGTGCCCC TTTACTTCTT
 GCTATCTTCT TCTCTCTTC TTCTCTCTT TGCCINTATG CCTGTATTT TGGCAATATG ACAGGCTGCT CTACCCAAGA
 TCAGAACTCC AAAACCACTC CCACCCCTGA AGGTGGGGAG GGTCTTAGCA GCGCTGGGTG GCTGCTGTG CTCAGGTCTT
 CAGCTCCATG GGAATAAAA ATGGCACCTT GAATCTCTAG GATTTGTCA CTTTGGAGTC ACAGCAAAGT TCTCTTCTC
 TTGTCCCCC GTTGCTGCT CCTTGGGTTA TAGGACATGG TAAATATTTA TTACTTTCAG GGAACCACTA TTTTATTAG

SEQ ID NO:185: (Length of Sequence = 263 Nucleotides)

CAGAGACACT GGCCAGCTA TTTTCAGCAG GGACAGAGTC GAGGCTCACT GGGGATGGCT TCAGAGGACA CTGAGGCCCC
 TCTCAGGGAG GGCAAGGCAC AGATACCCCA AATTCCACCC CACGTCCCA AGGTCTCCCA GCGGGGCTGT CCAGTCCATG

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GAAACTTATA GTCTTGCCCTC CCAACCTTCT GAACACTCCA GTAGAAAAAT CTCTCGCCT ACCTTTATCA CCCCAAGACC
TACTAGCATT TCTTACTCTC AAAAAAATC TTTTCTGAAA AATCAAGACA GAGTGCAAAC AATCAGCATA ATTTTATTAT
GACARAACCTT TTAAATTTTA TCCCCCTCTC TGAGAGTCT GCTAGGACTC CTTGAGATAA GTGAAAAAGA AAKTTTTTAA
AATTTATTCT CAAATCOGAA TTCCAATCTG TATAAAAAGG GCGATTCTCC CTC

SEQ ID NO:173: (Length of Sequence = 282 Nucleotides)

GCTTGGTCCC GTTCCTCAGG AAAAGGATGG ACCTTCTCTT CTCTCAGAT GGTCCTTCC ATTCCCCTGA AACCTGCATG
AGAGCTCCTA ACATGTTTCT CCAATGCAAT CAAGCCTAGA CTCCAAATGT CCTCCAGCT CACCTCCATC TATGCATCTC
ATCTCTGGAT TTGGTGATCA GACTCTATAT TGACAGTAGG ATCTCAAACC CTGCATCCAT CCTTCTCCA GCAAGCCCTG
CTAGCCACAT GAGGAACAAG TTTCGGTCTC TTCATGACTT CC

SEQ ID NO:174: (Length of Sequence = 353 Nucleotides)

CAAGAGGTGG GAGAGGTAGG GGGCAACTAC AGCTCCCCAC CAGCCCCACC AGGGGGAATG GACCCCTCCC TGCTCTCTGC
CCAAGTGGCT CCCCCTGTAT TATGGGGGGG ACTTTGTGCA AACTCTGCCC CGAGGGGGTG GGGAGGGTGG AGGGTGAGTG
TGAAATGGCA GCGTTGGGG CTGGCAGCTG TGCTACTGGG CACTGGGGGG CTGTAGGGC TCCAGGAGGA GGGCCGAGAA
GGTGTGACC TTGTCTGCC CCGCACCTC ATGGGGTAAC AGCGGCAMIT TCACGATGTG GAAGTCTTC ATACAGGTCC
TCCAATCTGG TCCAGATACT TGGCCTGGST TCT

SEQ ID NO:175: (Length of Sequence = 394 Nucleotides)

GCCCATGCCC TTGTGTACAT AATCTCTAAT ATTTATATAT ATGATATAG AATTCTCTCT ATAATATATG TCATAGAATC
TCTCTTGGGC CTGGCGTGG AATGTGACAT TAAGAAAACA TGCTAAGACT GGCCAGAAAA ATGGATATTT CCCAGACCTG
GAGGATGGTG TTGTGGGTGT ATAGGTGAGG TCGTGGAGAA GATAATAAAC TCATTCCCCA AGATACCTTC TTCAACACAA
GGACAAGAAG GAAGGTGTGT GGTGGGGGAG GGGACAATGG AGGGGGAGGA GTGGAAGATT TGATTTTCA TTTAATAAAG
TCAATTGAAA AATGAAAGTG CACCCCCCT CCAAAAACA GGAGATTCAT TTAGCAAGAG CGTTTTCATT CACA

SEQ ID NO:177: (Length of Sequence = 381 Nucleotides)

ATTGGGACGG GCCCCCTCT GAGGOGACGG ATCGATAAGC TGATATCGA ATTCCCTGAT NTTTCTAGT GFTATGGTTT
TCTCCACTC CAATAACTWT TCATACCTKT GGTCTKAGTT TTCCATCTA TAAATCATG TGCTAAATAA TTAATATCA
TCTCTATCAT TGTGAGACTA CACAAAGCTT CCAGCCTGGG CAACAGGAAC CCTGTCTCTA AAAAAATAC AAACATTAGC
CAGGTGTGGT GGTATGQCC TGTATTCCA GCTACTTGGG AGGCTGAGGT GGTAGGACTA CTGGGCTTT AGAGGTCAAG
GCTGCAAGTG AGCTGTGATT GGGCACTGC ACTCCAGCCT GGGCAACAGG GCAAGACCT G

SEQ ID NO:178: (Length of Sequence = 443 Nucleotides)

GATTTTATTC AAACACAGGC AAGAACAATG ACCTTCAGAG CTGGGTAAAA ATAATAAGTT AAAAGCATGG TTAGAATTTT
AGACAATCAG ATAAAAAGTT TGAAGGAAGT GATTTCCCTT TCCTCTCTA ATTGATTAAT TCAACACAGC ATAAAAATAA
TTTGTATCTA TAAATATCC TTGTTCCAC ACAATGAAC TGGAGGTGGC CTTAGGATTT CCTTGACTAT GCACAATGCA
CACAACTAC ATGTCCCTCC TCCCCAATT TTAAGGCAAA AATGGTCTG CATCTTCAGG CAGAGGGTGG GCTCATGCCA
GCAGTCAGCT GTGGTCAAGG ACACTGGGG TGCGTTTCT CCACCGAAAG ATGCCTGCTT TGGGTCCACT TTGGGCGCGG
GATCCCATTT TATTTTCTAG CTTGTGCTC ACCACAGGA AAA

SEQ ID NO:179: (Length of Sequence = 325 Nucleotides)

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GAAAACTTTG CCATGGGTCA GTTTTATTGG AAGTTCATTT TCCTGAATGT TTGGAAGAAA GTCTAGTGAC TCAGGATAGC
 ATTTCTAATT TCACAGAGTT ATTTTTCOGT TATGAAACAC AGATTGCCTT TGAGGTCCTC TGTPTCTACT ACTGCCCTC
 ACTTTTATGT GGGCTCTCTC TTTCCTTTGT TTCTGGAGAA CCTTTTCTGT TTCAATTCTG TTTTAATTTT CAGCAGTTT
 TTTTCTGTGT GAGTGAGGCT GTTTCCTAGC AGGGAGGTCT GGTGGTTCAT TTTCAAGTTC ATCAGGGCTT CATCAGGGCT
 TGTCCTTTC AACCTTACG CTATAGGNC CTNIGCACCA TCTGCANTCT TCAAAATGTG CCGACTGGTT CGTCCCATG
 GANGGCTGT TGGTAATTG GCTTTTAGG GGGGGCCATG GAAGGAGCAA ATC

SEQ ID NO:167: (Length of Sequence = 285 Nucleotides)

TTTACTCTTA AACTGTTC AACAGAATCA TGGACTGACA CAGGTAATGG CTGAGCCATA AGCAAATCGA GAAGTACAGA
 AATGTCCAC CCCAAACAGC TGCGGAGTAC ACATCACACA GGGCTCTGG TCCCGGCTT CTCAGGTGCT CTGGAGTGA
 GGATCCTTTG AGGGAATCT GACCACTCT GTTGTCTACC TAGAGAGCAC GCCACTTGGG CCACCTACCC CCAACCTTTG
 GCCAAAGGAG TGAAAGGACC TGAACCTGT CGTCAACCTC AGCAT

SEQ ID NO:168: (Length of Sequence = 327 Nucleotides)

CTAGAGGGCA CTCGTATAC CCGTCAGCTC CTGGAGCCAT TCATCTATG CTGGGCAGAC AGGCTGTGAG AGGACATGGG
 GGACGGTGA AAGNTCCAA AGACGAAGCT GINGTTTATC CTGTGTGGTT TTACACAGGG AATGATGAAA CATTGAAGGG
 GTTTAATAAG CTTTCTTAA AACATTTTCC CCTTAAACAG GCTGGCACTA TGTCGAAGCT GCCCAAATTT GAGATTGATT
 TACCAGCTGC GNCCTAAGTCA ACTAAACCCA NGCTTTTCCG AAAGAGACAT CGCAANTGGC TTACCCAANG TANTGTCCCG
 TTTTCAG

SEQ ID NO:169: (Length of Sequence = 346 Nucleotides)

GGTCTATGG AGAGCCGGCC GTCTCCAGG GTGAGCTGG GGAGGCTTCT GCGGTCTGG AGTCCCGGG ATGGCGCCAG
 TTCCCCAGCA AACCCCTCC AGAGCTGCCC CCGATGCAC AGACAAGGAG GGGGCTTGG AGTACTTGA GGCTGTGAGC
 GGTGCGCCT CCGTGTGGG AAGTGAGTCC TCTGTGGCCA AGAGGTGAGA GTCTCCCTG AGGCTGAGTC GAACACAGAC
 CCGTGGCCT CATAAATTA AACATAAAG CACAAAATG GCGCAACCA GACAGCATTG GCTTTCAGAC AGGCAGGGAC
 ACGGGGGCC CTTGTGTG ACCTGT

SEQ ID NO:170: (Length of Sequence = 398 Nucleotides)

TGACCTCAA CTACTGAGC AATGCCGTAG CTATGGAATA GAAGCATTG TTGCACTCT TTTGTGAGCC AGGCCCTGTA
 GGAGGGATTG TGGATGGCAA AACCTCAGGT TCTGCCAAA TCCTCCCTT GGGGCTGGA GGTCTCTAG TTAATTGGCA
 TTCCGGTGCT TAAGGCCACT TTTGGGTAGA GGTGAGCAA GGATGGAGTG TCCAGACCTA TGATCCTCTA AGAATTATC
 CTTTAAAAA CAGCCACCCA AATGGTGGTG GGTGGGGAG CAGGTGGTGG TGAAGGGACT GGGGGTGTCT GGCCATKGCC
 ACGTACCAGA GGAGACTCTG TGAGCCCTCT CCTGCCCTGA GGGACACTTA ACTTTTATAG CACTACATAG GGTCAACG

SEQ ID NO:171: (Length of Sequence = 321 Nucleotides)

AGACAGCATC TGGCTCTGTC ACCCAGGCTG GAGTGAGTG GCGCAATCTC GGTTCACTGC AACCTCTGCC TTCCAGGTTC
 AAGTGATTCT CTGCTCTAG CCTCCCAAT AGCTGGGATT ACAGGCATGT GCCACCATAC CCAGCTAATT TTTGTATTIT
 CAGCAGAGAC GGGGTTTAC CATGTTGGCC AGACTGGTCT CGAATTCTG ACCTCAAATG ATCTGCCCAT CTAGGCTCTC
 AAAAGTGCTG GGAITATAGG TGTGAGCCAC TGCGCTGGC CCTTGGGTAA ACATTCAA TGCAMCCAAC CATTAAAGGT
 A

SEQ ID NO:172: (Length of Sequence = 293 Nucleotides)

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GGAGGCTGAG GCGGGCGGAT CACGAGGTTA GGAGATGGAG ACCATCCTGG CTAACACAGT GAAACCCTGT CTGTACTAAA
 GATACAGAAA ACTGGCCGGG CGTGGTGGTG GGTGCCTGTA GTCCAGCTA CTGGGAACT CCGGAGGCTG AGGCAGGAGA
 ATGACCTGAA CCGGGAGGC GGAGCTTGCA GTGAGCAGAG ATTGCGCCAT TGCACTCCAG CCTGGGCGAC AGAGTAAGAC
 TGTCTCCAAA AAAAAAAAAA ATAATAATCA AAGCTCTTGG ATTTATAGTT TGGTCCCCAG CCTTGTMTTG ATCTTTCCCT
 TATCTGTTT TATTGCCATT TACCACGTCC TTTTGGAAAC ATCCCTTTCA ACTGCTG

SEQ ID NO:161: (Length of Sequence = 273 Nucleotides)

GCAGCGGCGC CCGGCGAGGA GGCGCAGGG GCGAGGAGGG GCGGCGGGT GGCGACCGC AGGAGGCCAA GCGCCAGGAG
 GCGCTGTGCG CGCCAGAGAA GCGCCCGCC AGCGACGAGA CCAAGGCGC CGAGGAGCCC AGCAAGGTGG AGGAGAAAAA
 GGCGAGGAG GCGTGGCCA GCTCCGCGCT GCTAGCCCC CTTCGCGCGG GCGGCGCGG CCGCGGAGC AAGGAGGCAG
 CCGCGCGGA GGAGCCCGCG GCGCGCGCAG ACT

SEQ ID NO:162: (Length of Sequence = 286 Nucleotides)

TTTGGTCAA ATAAATCAGA GTACTACAAT CATCAACAT CTGATTCAAT TAACATGTGA GCATCTATAC CTGCCCATTT
 GTGTGAATAT TCAGTATATA TCTACATCT ATTCTCATGC CTTCATTAT TGTGTTATG GCTGTAGATA TGGAAAAAAC
 AGTAGCTGAG ACATTTTAT TATGAATAT ATTATACCTT AATCAATCAG TCAGAAAATG CTTAGGAAGA AGAAATGCAT
 GATTGTAAAT GCATGATTTC AACATGCTAC CCGGCCAACA AAGTTG

SEQ ID NO:163: (Length of Sequence = 342 Nucleotides)

TGCCCAAGGA AGACAGAACA TGGAGAACCG TCAAGGCAGG AACCCACAG ACTGTCCCTT CCAGCCCACA CTCTGCCACC
 TCCTGGCCCT GTCCCAATTC TGAGCCAAGG CCTCCCGAG GCAGAAGTTG CCTGGTCCCT TGTCCCCACA GTGACCTGAC
 TGGGGGTGAG GGAGAAGGAG GAGAGAGCCC ATGTGTGGTG TGTGTGCCCC TGAGAACTTC GTGGTACTG CCTTTGGGAG
 CCGCAAGTG GCCAGAGGCA GGGGTAGCTG AGTTCTGGG AGACCCCTTT TTTTCCCCCA RGTTCGCCAG AGGGCAACGC
 CATCAGTAGC AGTGTGGTGT TT

SEQ ID NO:164: (Length of Sequence = 392 Nucleotides)

ATTACCGGG CCGCGCTCC CTAAACAGA TCTACGACC TTAACGAGC CCATGCTGAG GCTCATTCOA TCCCTGCRGA
 CGTATGCAGA GCGCTCACT GCTGCCATGG TGGAGTTCTA CACCATGTTA GGAGGAATTC ACCCAGGATA CACAACCTCA
 CTATATCTAT TCACCCCGTG AATGACTAG GTGGGTGAGA GGCATCTTTG AAGCGCTGAG ACCTCTGGAG ACCCTGCCCTG
 TTGAAGGCCT CCTTCGGATT TGGGCACATG AAGCTCTGCG TCTCTTCCA GATAGACTCG TAGGGGATGA GGAGAGGCGT
 TGGGACTGAA TGAGAAGATC GACACGGTTG CTCTGAAGG CACTTTCCCT AACCTTCGGC AGAGAGGAGG GC

SEQ ID NO:165: (Length of Sequence = 406 Nucleotides)

GTTATAATTA TCTGTTTTA TTATTIATTG TTTATCTCTT ACTGTGTATA ATGTAGAAAT TAACTTTAC CATAGGTATA
 TACATATTGG AAAAAGCATC TTATATACAG GGTITGTTAC TATCTGTGGT TTCAGGCATC CACTGGGGGT CTTGGAACAT
 ATCCCTTGCA GATAAGAGGG AACTGCTGTA TCCATAGAAT AAAACACCC CATCTTGAAG ATAGGAGGTT CTGTAAATTG
 GGATGGGGTC AGGGAATCTG AATTITAAAA GTTTCCCATG TGATTGTATG CCCAGCCAAG GGCTGGGGAC CACTGTCTTG
 AAATATAATG CTGAGGAAGA TACTGTCTTT GGATTTTCTT GGTAAATCCG AGTGAAATT CTCAGGCTGG AACCTTATGG
 GCCTTG

SEQ ID NO:166: (Length of Sequence = 453 Nucleotides)

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SEQ ID NO:154: (Length of Sequence = 405 Nucleotides)

TGGAAC TTGT GAGTGGGGAC CCATGATGTA TGGGTCTCAC CTGACTTGAG GTGAATTTTG GAGTGAAGGG CCCTGAGGTC
AGCTCCCAGG TCGGTCTGTC TGGGCCAGGC CTGGTTTTCA CAGGGGCTGA AGGATCCCAG TCCACCTGTG TGCATGTCAG
GGCTCGGCGG GGAAGAAGCC AGCAAAGTCC CCCGTGTCCC TTGCTGAGTA TTCTGTCACA GACAAGCCTC CATTAAAGCC
ACAGCAGTGC TACCCACCAC ACACACCTTG CTGGCCCGGC CACCACTGCT GGCTTCAGCC CCTTNAGCAG CCCATGGNTT
AGCAGACCCT CAGATGTAGG TCAGTGGCCT TANCITGINTC TATCCATGCT GTTAAACTCC CTGCCTCCAA CTGGGGGTCA
CCAGT

SEQ ID NO:155: (Length of Sequence = 40 Nucleotides)

CCATGATCTT ATTTATTACA TCTAGTTTTT CTTTATACCT CTAAAAAAA GTGCCTTTTA GATTACAGC TTGTGCTTCT
AAAGCAAAGG TTAAACATC ATGCCCAA GGAACAAG GTAAAAAGGA AGCTGCCATA TAAGCTCTTA AAANTGTAT
GTTACAAGGT TCTAAAATCT CTTCACTACT GGTGTGTTGG TAGATTGTAC GACACTGACA TGGTGTCTGG GAGGGTCATT
TATCTGATGG TTGGAGCAGC ACCATGGGAA AGCTGCCAG ATGGTCTACT GAAGTCTTG GCTGTGCACA GAATGGGCCC
AAGGGCCAGN AATTCATGAG TCCGGGGAAC TTTGNGGTC CTTACTCAAT CTCCTTAGTG CTAAAGNTTC AGAGTCTCAA

SEQ ID NO:156: (Length of Sequence = 443 Nucleotides)

GTCTCTGGA TTGCTTCGTT GGTTCGGAAC TTTAAGAATG GCAAACCTGTG ATTGNTCCG ATTAAGACAA GCTTTGTAGT
TTTCTTCGTG TAAACACCAA ATCCCGCCTG GGCCATGAGG TAGCAGAAGT GGGCCGCATC CAAGAGGCC CTTGAAGCCA
GAGTGTCCGC CATGGTAGCC ATCGTCTGG ACTCGACGTC CATGTTGTG TTCAAGTTGG ACAAGACCAT GGCAGGTTGC
GGCCTCCAAT CTCCCATTT CTCGTCTCCA CAGCACGTGG ACGCGGCAGG CATCCGTCCG GACATGAGCT GGTAGACTGT
CTTCAGAGGG TCGTTGATTK GGGAGGCTTT TTAGCAAACC TKGGTCATGA CTCGGGCGTG TGTCCGCTG TTCCATCTTA
CTTGCAAGTA GCAGAGCGTG ACCCCACAAG GCCATTCTTA ATT

SEQ ID NO:157: (Length of Sequence = 383 Nucleotides)

ATTGGAAGG GTTTTAAACG GAGTCGGAAC CTGAGTAGAT TTCAAATTT TACAGCCAGG ACTACAGAAG TGCATCATT
TAGAATGTGT AGACCTGAGT AGCTTATACA CTACAGAGCA CTTTGCTTAT TTGAAAGTAA TTCAGCAACA GGTCACTTTG
GGATATAACC TGAACCTTTT TTTGGAGTGG GGTGGGTAGA CTACAGTGA CACAAGGGCT GGACATGCAG ATGCTTAGGG
GATTAGCGTT TTTCATAATT TGTTCTGTT GTCACTTCAT TCCTGTGTGT TCTTACCTCT ACAAAGGTAC ATTACACATT
TTARGTTTTT TAGTGACCTT TAACCATGTT ACTTGAAGCA TTTTGGAAATA TAAAGCTATT TTA

SEQ ID NO:158: (Length of Sequence = 241 Nucleotides)

TGGTSTGTGG CTCAGCTGCA GCGGCASGTA AGTGGGTSTC CAGGGGAGTG GACAAGCAAT TCTCCTGTCA TTTGCAACTT
TCTTCAGGAA CTCAGATAAA GAACACTTGG ATAACGATGA TCCTGTGAGA GGGATTTTCT CTGTACCATC ACACATGGAA
GAGGAGTTTC TAGGTACAGGA AAGGCAGCTN CTAAGCTAAA GGTTTCTTGG TCCCTGTGTC CTGGCATGCC TTAAGGAGGG
G

SEQ ID NO:159: (Length of Sequence = 224 Nucleotides)

CTGTCACTAA TGGCTCACTA AAGGGCCAGC AGTTTAAATT ACACAGGTTG CACTAAAAGC TGCAGCTTTG GCCAGGCAAG
GTGGATCAGC CCTATAATCC CAACACTTTG GGAGGCGAG GCGGGCAAAT CACCTGAGGT CAGGAGTTCA AGACCAGCCT
GGCCAATATG GTGAAACCTA AGCCTCTACT AAAATTACAG AAATTAGCCG GTCTGTGGTG CACA

SEQ ID NO:160: (Length of Sequence = 377 Nucleotides)

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GGGTCAGTTT CCCAGGCCAT GCGGGGGGTG GCCATCTATG CTAGGGCTGG AAGCTGAGGC TGGCCGCCAA CTGTGGGGCT
GGGGTGGGGG TGGGTGG

SEQ ID NO:148: (Length of Sequence = 278 Nucleotides)

GGAATCAGAT GCTCAGGTGT CCAAGCAGGG ATAAGGACAG GCAAAATAAA TAACCCGCCC AACCCCATC GTCACCTGTC
TGCAACACGA CACAAAGGTT TAAAGATCTG GGCCCAAAGA CTCTGGGACC CTTCAAGCAA GTCAGGTGGA AGAAGGTTTC
CCCACCCCCC ACCAGGCTTG TTTGTCCAG GTTGCCCTAG GATGGAGGCA GTTCAGACCC TGGGTCACTG ATGCTTGATA
GGAAGATCTT TGATATCAAT GGCCTAAGCT CTGCTCAT

SEQ ID NO:149: (Length of Sequence = 368 Nucleotides)

TTTTTTTTTT GTTTTCAACA AACTTTACTA AATAACCTTG GAAAGGCAAT GAACGATCTG ACAATTTAAG CTCTAATGAT
TTAAAGCTCA GCTAGAAGAA AGTGAGGCAT GACATATACT GTCAACGGAG GGTGAAGGAG GCAGATTTCT GGAAATGCAA
TGATCCACCA CATTGTCTTC AAGGAGAAAC CTGCAGACAT ATTTTCAGGT CTTGCTAAGT AACAACTGTT TATTTGTAAT
CAATACATTT GGGGAAAGTC TGCTATGTAG CTAAGGTCAC TGTGACCACA GACCAACAGA TGGAAAGGAA AAAGGCACTG
GACCAGCAAG GAAAAATACA TCCCACCTCT CAAAAGAATT TTAAGGTG

SEQ ID NO:150: (Length of Sequence = 367 Nucleotides)

TTGTGAAATG GGCCTGGGTA GATAAGGAAA AGAACCTCCA AGAGGTTAAG TGATTTGCGG ATTGCTCTAA ATTATACAGA
AGAGTCAGCA CCAAGTCCCA GGCCTTCTGA TTCTTAGTGC AGTAAACACT AAGCACCATC ATTCCATTTT ACCACACTCC
TGCTCTGCTG TTGTCTCAG CTAAGAAAGC CTACCCCTGA GTTACCCCTT TCCATCTTAG AGCCTTCTTG CTGCTGTCT
GCCCCCTGTC GATGGGGACT TCTTTGGCCC TTCTCACCA GCCAGCCTC TGCCCGTTTT CTTCTCTCTT TCCACTGCGG
CTGAGCTCTT TTCTCCTTCC GAGAAGCCTT TCCTTCATCT TTCTTGG

SEQ ID NO:151: (Length of Sequence = 366 Nucleotides)

CCCAGCGGGC CGCCTCCCTC CTCTCTCTC CATAGGTGGG GGTGTGGGC CTTCTTTTTT TTTTGTCTT GGAGGGCAGT
TAAACTTCTC CATTGCTCTC TCTCTTCACA CCCAAATGCC AAAGGACACT TTCTCTTCTT TTGTGGGTA GTTGCAAAAA
AAAAAAATTC CTATGGGTA CTGCACTTT TAAATACTTT GTAACCTTAA GGCAAAGTAG TATGTCACIG TTTCTTTTCC
CTGTAGTTTA CTTTGTAGGT TAAACATCTT TCCATGTCTT TATTTGGTCAA ATACAGTTCC TYCTTTTGTG CAATGTTAAT
CCTAATATGG ACCATTTTTC CTAATGGGAT TACGATTTT TTAAAA

SEQ ID NO:152: (Length of Sequence = 269 Nucleotides)

GTTATCTGCG CAAGTGCTTT CAGGCGCTC CAGGGTTTGG CTGGTCACCA TGGAGGGGGG GTTCAGGTGC TGAATTTAGG
GACCCAGCA TCTCACAGT TTCCCTTCC ATCTTTCCA GTGGCACTGT GTCTGAGCAG GTGTGCCAG GTGAGGTGT
ATCCACTGTG TCTGAGCAGG TGTGCCAGG TGAGGTGTGA TCCACTGTGT GTGAGCAGGT GTGGCTGTG CAGGTGGAAG
TGGGATATN TGGGCACCTG GGTGCCATT

SEQ ID NO:153: (Length of Sequence = 260 Nucleotides)

TTTCAGGATT TTATTTAAAA TTTATGTGTA TGGGGTCCGC GCAAAAGGAA GGGGTGGAGG GTGGGGTACA TGCAGGGGAC
ACAGGAACAN GATCCACATG GCCAGGNC CACTTCTTC TGTCTGGGG AAGAGGGATG AAAAGACAAG ACCAGGGCTA
NGAGCTGGGG TGGAGAGGG GAGGGGNAAC ACTGGCTGCA TTCCCNAC CCCANGANG ACCTATAGGC CCTGGACCCA
TGGGTCACCC TGGGCCCTAG

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AGGAGGAATC CAGCTGGAAA TGCCACTAAC CCCACATCCA GCACCTGAGA GAGGAAGCCA GTCGGAGCGC CGTGCTGGGC
TCACTACTC TGGGCCTGCG CACTGGGGTT GTGG

SEQ ID NO:142: (Length of Sequence = 373 Nucleotides)

GTITTTGCAA CACTTTTTTT TTAAGTTATT GGGTGCAAAA TCCCAAACCA GGATATGTGT ATGTCTGTGT GTTTATGTTT
TINATTGAC CCTCCCCCTCT TTCAACCTAC CCCCTTTTAT ATCTAATGTA GAAAAAGCGA AATTGAATCT GGAAAGCAAA
CTGTGTATA TAGTTGCGGT AACAAATCATG AAGAGAGAGC CGGGCTGTCC AGTTGTTTTT GAGACAGAGT CTCCTCTGT
TGCCAGGCT GGAGTGCAGT AGCATGATCT TGGCTCACTG CAACCTCCCC CTCCTGGGT TTAGGCGATT CTCCTGCCTC
AGCCCTCCCA AAGTAGCTGG GATTACAGAC CGTACCACC ACAACTGGGC TAA

SEQ ID NO:143: (Length of Sequence = 262 Nucleotides)

COGCACCTCG GCCAGAGGCG GCTGCAGCAG CTGCTMCCTT TTCCCTGCCG CCGCCTCTCC AGTCCCTTTT TTAATTACCA
CTCCAMCTGC TGGGAACGGG CGAGAAAGAG GAGGAGGCGA GAAACTCCCA CCGACCCACA GAGGGAGCAT GATTTCGGCA
ACTTCACCTA TCATTCTGAA ATGGGACCCC AAAATTTTGG AAATCCGGAC GCTAACAGTG GAAAGGCTGT TGGAGCCACT
TGTTACACAG GTGACTACAC TT

SEQ ID NO:144: (Length of Sequence = 384 Nucleotides)

GGAAAAGCGG GACCCAAACA GTGGTGCTGG GGAAATTTTT CCCTGTCCCC TTGGAAGGC TGAGTGGGTG ATGCAGCACA
GGAACAAGGC TTGGAAGTCA GAGGTCTCAT CTTCAGTGIN ACAAGCATA AAGGACTTGG GGTGAGCGT GTGINTGGGC
TCAAGTGACC ATGCAAGTCC TGTCACCTCC TTCTTAAGAC CCCATCCTTC TCCCAAGTCC TCCACAAGAG CTACCTTCTT
CAAAACAATA ACAGAAACAC ATCAAGCTTG GGGTCACTG AATTCAAGTT CTGATTCTC CCGTACCCCC AGCAACAGTG
CCGAGTTTGA TTGTGACACT TTGACCCAGC ACTTGGTTTT GAATGTTCTT TTGGGCTTGT ACCG

SEQ ID NO:145: (Length of Sequence = 324 Nucleotides)

CTACATGGAA TCATAAGTKT TCCTAAAAAA GGAAGACAGA TTTGAAGACA GAGGAGGAAG GTGATGTGAT GATGGAAACA
AGGGGAGAAA ACGCAATGTG ATGTGSCCAG GAACCAAGTA ATGAGGACAG CCTACAGAAG CTGGTCAAGG CAAGGAAACA
GATTCTCTC TAAAGTCCCT GGAGAGGGCC TGGCCATGCT GACACCTTGA TTTTCTCCCA GCAGAAACTC ATTTTGGATT
TCTGGCCTCC CAGAAAAGTA AGGGGGTAAT GTGCTGTTTT ATGTCAGGTT TKGGGTAAAT TGTTTATTGC AGCCATCGGG
AAGG

SEQ ID NO:146: (Length of Sequence = 355 Nucleotides)

TTTGCTCCT TCCTTCCCTA TCCAAGCAAG GGTGTGGTGA CAATGACCTG ATCGGGGTTT AACGCOGGCT CTGTCTGCTC
ACCAGACCTG GGGTGCTGAG CTCTGACCAG CCTGGGCAGC CCAACCCACA GGAAGTGGG TTTCATAGCT GGGTCTTCAG
GAAGGGGTGG AGGCTTTGGG AGTGGCAGCT CCGCGCTCC CACCACCCCA AGCCAGAGAA TGGGGCAAAC TTGTATGCAT
GGCTTATCTC TAAATTACTA ATCTGCTTCG GACCAGACTC ATCTCTACAG TATAGAGTTA GAGTTATTGC TTCTATGACA
GGTGTTCCAG AAGCCCTGGG TGGCTTTAAA GTCTG

SEQ ID NO:147: (Length of Sequence = 337 Nucleotides)

CAGTTTTCTG AGTTCCCGTG TGCTAGACTG GCCAGAAGAG AGGGTCTGGG GCCTGGTCAC TCGGCCACTC TCTCCTGTTT
CTGGCCTCTT CTCCCTTCAC TCCCGTCCAG TCTGGTTTTG AGAGCAGGGG CTGTTCTACA GCACCTCAGG GAAGGGAGGA
GAGATACCTG CTGCTTCAT TGCTTTTCCC TTCTGGAGT CGATGCCTTT CTAAGGGTTG GAGCTGCTCC TTGCAGGGGC

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TAAGGCTCA CTCGCGCTG TGAAGGTCTC TGATCACACA GAAGCAGCCC TGCCCAGCCT GGGTCATTTG CTGTCCGCTT
 TTCTCTGTGA CCACAAGCAG CCTGAACAA CCAGTATGTG TCTTCTTTCT CCAGATAGTG AAAAAGGGTG TOCAGATAAA
 CCCACCTAAG TGAATGGGC CATCTCTAA ACTGGGGTAC CTCAGTGCAC AGGTTCTAGG TAGGCTTTCC ACTTAATCTA
 ACTTGAGGCC TACAGGTACC CTGTAAAGTT AGTGGGGCTT GTCTTGATT GTGG

SEQ ID NO:136: (Length of Sequence = 279 Nucleotides)

CAGTTGGAC AAAGTAGCAT AGTGACTTIN TTCCTACANT GACTTTGGGA GAAGTINGCA GTTCTGGCA AAGTGACGCT
 GGGCTGTTG AAAAAGGCAA GCTTAGCCTA GGCTGCCATC TTAACACATT TOGAGGCTGT AGCTTCCTCA GGATCCTTTG
 CCTGTGGTCT GGTGGCCGGC AGTGCCCGGT CTAACAGCTT TTAACCTGTC ACTTAGTGCC TGAGCACCTA TGGCTGTGAG
 AGATGCTAGA TACAGAACCC TGTCTGTAC CACGTGGGG

SEQ ID NO:137: (Length of Sequence = 518 Nucleotides)

CAAAATATTA ATGGAGATCT TCCTTGTTGG TCTGTATAT GTCATCCGT TTCTGGGTGG TTTAGGAGAA TCTGTACTAT
 TTCAGCATGT CCTCTCCAG CAGCAAAATG AAGAGGAGAA CTAAGTTGTC CATTTAAAAG GTTGGATTG CACTTTCCCT
 TCTCTAACAA TATGCGAGTG GCCTCAACTT TTCATACCA GCATGCATAA TGAATGGGTG CCCAGTGGTC ACTATCTAAC
 TGGTTGACTG AAAATCTTTC ACTGAGAAGA CGGCTTAGTA ATTCTGAATC TCCTTCACAG GCGCTTCGGT GGAGAGGAAA
 ATCATCTACC CACTGTGTT CCTGTCTTC TGTGACACTG CTCATGCTTC TCTGCCAGTT TTTCTGTTT AGGGTATTG
 GATTTTGTAG TAGTCTGGAG CTCCTAGACC CAAGTATGGA TTTATTACC ACTTATCTAC CGATTTGTA TACTGAGGAT
 CCTATCCAAC AAAGGGTGTA AATCCAGGAT CCGCTTC

SEQ ID NO:138: (Length of Sequence = 266 Nucleotides)

GATTGCAGGC ATGANOCACT GCGCCAGTC GAGTGGTAAT ATGTTMAAG GAAACCTTTT TCTGAGCAGG TCTCAAAGA
 GAGGTAAAA TACTGAGTAG ACCATMCTGT AAACAGATGT MCTGTTATYC GGGCTTTCAT ATTCCATTTA TAAAGCACAG
 GCAGAGCTCA GAGTAGATTT AAYGTAACTC TGAAGGGCAC TAGGATTTTC AGAATGGTAA ATAAGCATTG GCTTCACCTT
 AAATYCAAAT CTGCATTGGG CTGTGA

SEQ ID NO:139: (Length of Sequence = 341 Nucleotides)

ACCTCGCTCA CGCTCTGAC CACCGACAG CAGAGCAAAG GATGCGGGAG TTGCTCTGC TGCCCATCTA AGGGGACGTA
 GGCAGAGAAG CAAAGGCCTC TGCTCTCCCT CCATCCATCC CGGTGTGCTG GCGCCAACGG AACAGGAGTC CTTCACCTAT
 TGCTGCCAG AGACCCAATT TTAGGGACTG TAGTCTGCAT CTGGATGAGC TGGGCTGTAG ATTGAAGTCT CAGAAGCAGG
 GAAGGTGGA AGGGGTAGGG TCCAGAGCC CATGGAGTTA TTGCTGAGAA GATATGCAGG GGACACATTT CCCAGGGGCA
 GAGTAGAAGC OCTGGGCCTT G

SEQ ID NO:140: (Length of Sequence = 234 Nucleotides)

GTGAAGGGAG TTGCAGAATC AAATTGCTAC ATAGGCCAAA CAAAAAGAA GGCTTTTTC AAAAACTTA AATTCACATG
 CAGTCTCAGA GACTATTTAG GCAAAGTTC AGTTAGGAGC TTTTAGGATG TGGGANATAA ACTTTAATKG GAGGGGAGGG
 CTGTCTCTG GAGAAGGAAG AAGCCAGACT TGTTAGACAG TACTCTTAAC TCCTAGCCCA GCCTAGCGTG CCT

SEQ ID NO:141: (Length of Sequence = 354 Nucleotides)

CAACTCAGGT TAGCACTGC AGGAAACTT TCTTCATTT CACTGAATTT TAAAGAGAGA ATCTGTCTC TATTCTCAG
 AGAAACTTAG GTGAAAAGTA AAAGAGAGGC AAAATCTCTT TCCTTCATGA GATACTTTA TTTTATCTC TTTCTCTACT
 CATGTGCTTA ACTGGTGAAA TGATTCTGTA GAAATAGATC CTTCTGATTC TGCATCTCAT TTCTTATGG CAACTACAAC

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GCCTTTAACA TCCTCTGCCA ATRACTGGCC TCAAATCACC AGTGGAACTT TTTCAAAAAA TACACCATTG GCTCTATGTA
GTTCTACTGA TCTRAAATAT CCACGTGTGG GCCAGGAGCA CTGGCTCATG CCTGTAATCC CAGCATCTTG GGAGAGCGAG
GAAGGAGGAT CATTTRAGCC CAGGAG

SEQ ID NO:130: (Length of Sequence = 307 Nucleotides)

ATAAAATACT TAGGAATATA CCTAACCAAG AAGGTGAAAA ACCTCTCCAA GGAAACTAT GAAACTGTC TGAAAGAAAT
CATAGACTAC ACAAATACAT TTCATGCTCA AGGATGGGTA GAATCAATAT TGTGAAAATG GCCATACTGC CAAAAGGGAT
CTWCAAATTC AACGGTATCC CCATYAAATA CCACCATOMT TCTTTACAGG NITCGGAAAA GGAATTCCTAA AATTCATATG
GGACCCAAGA CGGGGGCCGC ATAGCCCATG GCCGGCTTAG GAAWAAGGGA CAAATCTGGG AGGCCTT

SEQ ID NO:131: (Length of Sequence = 184 Nucleotides)

CCAGGTGGA TGGAGTGCAA TGGCAGATC TCGGCTCACT TACCTCCC AGGTTCAAGC AATTATCCTG TCTCAGCCTC
CTGAGTAGCC GGGATTACAG GCACGTGCCA CCACACCCAG CCAATTTTIG TATTTTITAGT AGAGACGGGG TTTCACCGTG
TTAGCCAGGA TGGTCTCAAT CTCC

SEQ ID NO:132: (Length of Sequence = 270 Nucleotides)

GCNGGAGGGC GTCGAGGGCC AGGAGCTATT CTACAGCCCC GAAATGGCTG ACCCCAAGTC AGAATCTTC GMENAGACAG
CCAGGAGCAT TGAGAGCACC CTGGACGACC TCTTCGGGAA TTCAGACGTC AAGAAGGATT TCCGGAGTGT CCGCTTGCGG
GACCTGGGGC CCGGCAAATC CTCCGNNNC ATGTGTGGATG TCCACTTTAA CCCCACCACA GCCTTCAGGG CACCCGACGT
GGCCCGGGCC CTGCTCCGGT AGATCCAGGT

SEQ ID NO:133: (Length of Sequence = 529 Nucleotides)

CTTGCACTAC ATAGCATGTG TATTACTGAT AGCTTTATAA ATCTGCCAAA TAACATAGAA TGTAGCCTCA AAAGGATGGT
CGAGGGTTTC CAATCTTCTT TTCTCCACCC AGTGGTGTGG AGCAACTCTG TGCCTTAAAG AGGGCACCAT GGAAAGAAAC
AAAAAGGAAT CTCTTTCAA AATGCTGAAA TTAGGCTTAG CTCACTACTT TCAGGATAAA GACAACGCA TCTAATTAAG
TCCACTCCAC ATTTCTTTGG ACTCTAAGTA TTCTGCACCT GAAGGCTAAA TTGAACGTC TCAGCCCTAT CTTTTTTGCC
ACATCTTTAA TTACAAATCT ATTTCTTCTT CCTTTCATTT ACTTCTCTTC TCTTAAGTAA GAAATGTGGG AAATGAGACT
GGCAGTTTGG TTTGTTTGA TGTGGGTGTC CATTAGGCGT CTCATCCTAT GGCCCTTTTT GGAAATGTTG CCTTCCTACT
ACACACCTGG GAGGTTTCCC CAAGGCTCAA CCTTTTGTCT TCAGGTAAA

SEQ ID NO:134: (Length of Sequence = 437 Nucleotides)

GACGGTGGCG ACGCGTCAC CGGGATGTG TCCTGCCACC AGAGGAGGTG TCGTGGCGG GGAGCAGAGG GGCTTTGTTT
CCCAGGTGAA GGTGCGGCTT CTTCATCTT AGAGGTGCGT GTGTGGGTGG GGGTGCTTGC TGTGAGGTT TATGCGTGA
ACTGACAGCT GTCCCCAAG CCATGCTGGC AGTGTGTAGG TGTGTGCGG GCCACCGCAG AGGAATCCTC TGGGCTTCTG
TGGTTCAAGT GGGGCCAGC GCAGAGCTCC ATGAGTTGCT GAGCAGCCAG CCTTCAGCA TCTCCTGGGT TTTGGCAGCA
GGAGGCGTCC CTTGTGCAA TTCAGGGGGC CGTGGGGGCT GGGGGCACTC GTAGCAAGGT AAAGGAGCCC CTGCTCAGGC
CCTTGTTTGC TCCCTTTCT TGCAAGAGGG GTAGAGC

SEQ ID NO:135: (Length of Sequence = 534 Nucleotides)

GGCATTGTTT TGGTGGGTGT GTACGCTCC CAGAAGACTG AATTATGGT AGGATCACTC GCAAGGCCTT GTGAAGGAGT
CTTACCTAAA ACAAAGAAA TATCAGGGAC TTTTGTGAC TATTACAAC TCAGTTTAC ATTTAAATTC AGGCAGTGT
AATATGCCAA GGTAGGGAAT GTGCCTTTT CAGAGTTGGC CAGGAGCTCC TGCTGGGAC ACGGAGAGGC AGGTGTGGCG

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ATCCAGGCTT TCATTTCTAG CCAACCTCA AACACCACCA ACTACAAAGA AAATTTAAAA GTCTAATTG TAACCTTCAG
ATAAGTATAA ATTAGTTTTT TCTAGGCTTT CATTATTTGG CTCTCTATAC AATCTATCTT GTAAAGTACA TTCCTCTAAA
TTTACATTAT CTAAATTAAG GGCTAAGCAT TATTTAAATC ANTTAATCAT ACAATATTTT ATGGCAATAT GCACATATTT
ATAA

SEQ ID NO:124: (Length of Sequence = 330 Nucleotides)

CTCAGCGTAT CATAGGCGTG CTCACCTCC TCCCCAGCT CCGCCCCGC AGGCAGGTGG TGTAGGATAG AGTGGTGCAT
GAAAGGGGGG AAGCCCGAGG GCGCCGCTGG GAAGGGTCT GCGCCGTAAA GGGCATCCCA CTGGCACTGT GCGTCANCTG
CGCTTTCTG CTTAGCTCA GCCAGTCGCC GCGCTGCTC TTCAATCACT TGTGTCCCT TCTGTGCAG AGCTAGTTGG
CGCTTTGGTC TGATGTCTT GCAGTGTGGC TGCCAGGTG CAAGGAAGGC TGCCCGGTGC CATCTGCGG GTGAGTAGGA
GCGCTCTTTT

SEQ ID NO:125: (Length of Sequence = 281 Nucleotides)

CCTCTCTCC TTCGGTTCTC CATTACCGA GCCACAGTAT TTCTTAAAGC TCGTTGGCAG CCTGCACCCT GCTTATCTT
GGGAGACAG AGTTTGCATC CTATTACAAC CCATAGTTT TGCTATAACA TGGTGAAGG AACCATCCTT CCCAATCCCA
ACCTCAACCA AAGCTTAGAA AAAGTGCCAT CTTTAACTT TCAGAATCAC TCATAAGTAA ATCCTATAGC AGTCTCTGCT
AATGCAAAAT TCAATGTGT CCGCTTAT AGGTGACTTT T

SEQ ID NO:126: (Length of Sequence = 266 Nucleotides)

CTTTAATGA TGTGGTTCTG GTGGGATTTA TAAAGGAGA TGGACCCCTG GNAAGATGCT TTCTTAAACC ACAACCCACA
CATTGGGTCA CCATTTCTC TTCTCTCC TTCTGTGGT GCGCGAGAC CTGTAGGACC TTCCCTCCCT TTAGGGTTCT
GTAAAGCCCC TTTTCACTC TCAGAGTCCA TTCTCTCTT GTGCTGAGGG CCTGCAGTGG GGACCATATA CTTCTGGTGC
TCTTAGTTG CTGTGCGTC TGTTTT

SEQ ID NO:127: (Length of Sequence = 435 Nucleotides)

GTCTGGTTCT ATTCATTTTG TAGTTGCGAG AAAAGGAATG AACCGTACT ATGGCAATTC ACCGTGACGT GTGATAATTT
AGTTTGCTAT GAGTTTTTAC TCTTAGGTAA AACCTAGTTA TCCTAATTAA TAATTAGTTA TGGATGATAT AGTAATTTTT
TTTTTTTTTG ACTGCGTCTC ACTGTCAATC GGGCTGGAGT ACAGTGGCTG ATCAGATTC GGTGCAGCCT CGACCTCCCT
GGGCTCAGTG ATTCTCTGC CTCAGCTTC CAAGTGGCTG GGGATTATGG GCATGCACCA TCAATGTCTG GCTAATGTTT
GGTGTGTTTT TTATAAAGC CAAGGGTTTT GCGCATGTT CAAGACCCCG GGGCTGGTCC TTGAACCTCT TTGGGGCTTC
AGGCAAGTCC TCCACCTTC GGGCTTCCC AAAGT

SEQ ID NO:128: (Length of Sequence = 471 Nucleotides)

TTCCCTTCCC AAGGACTCGA CCGAGAACC GCCATGTACT CGGAGATCCA GAGGGAGCGG GCAGACATTG GGGGCTGAT
GGCCCGGCCA GAATACAGAG AGTGAATCC GGAGCTCATC AAGCCCAAGA AGCTGCTGAA CCGGTGAAG GCGTCTCGGA
GTACCCAGGA GCTCCACCGG GAGCTGCTCA TGAACCACAG AAGGGGCCCT GGTGTGGACA GCAAGCCAGA GCTGCAGCGT
GTCTTAGAGC ACGCCCGGG GAACAGCTC ATCAAGAAGA AGAAGGAGGA GCTGGAAGCC AAAGCGGCTG CAGTGGCCCT
TTGAGCAGGA GCTGCTGAGA CGCAGCAGA GGCTGAACCA GCTGGAAGAA CCACCAGAGA AGGAAGAGGT TCACGCCCCC
GAGTTTATTA AGTCAAGGGA AACCTTCGGA GATTTCCACA CTGACCAGCG AGAGAGAGAG CTTTAGGGCC A

SEQ ID NO:129: (Length of Sequence = 186 Nucleotides)

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TACCAATTAA CCCATCATG CTTTTAAACA ACCATCTGAA GGAGCAGAGA GGCAGGGTAG AAGACAGAAG GGGGTCTATG
TGGGTACTAA AGATGTTTCT GTTTTGTAAT ATTGTGTGTG TGTGGGTTTA TGGTTTGCTT AAGGGATCAA AACCTGGAAA
AAATGGGATT CCAGGAATGG CTCTGTTATT TTTGCTGGGT TCCAGCTTGT AATGCCTACT GCCTTGGTTC A

SEQ ID NO:118: (Length of Sequence = 426 Nucleotides)

CCCCACCCCA AAATCAAAC TGAAGGTAGT GTCAGTGTAT ATATGGNGTC CCTTGIGCTG AAAGTCAAAG CAGCTTCATT
TTGGGGCCTC AAGAGCTCCA GCTCTGGGCT CTTCACTCT AAGCCCATGG GCAGTGCCCG CCCAGTGGTG TGTATAGATC
GGAGGCTGAG GGCTCAGCC TTAGCTGAGC TGTGCGTGC TGGGGAGCCT GTGCAGGAGG GTACAAGTAG GAAAGTGCCA
TCTGCATGGG AAGAAAAATG CAGCGTCCTT GGTAGTGGCG ATGGGGTCCA GGAGACCCAG GGAGCTTGCC CAGAGGGACC
TGAGTGGCAT TCCTGTAGGA AAGCAGCCCA GATCTTGGGG CCGTAACGGA TGTTCGTGAA GTTTTGACTT TGAACCACCA
GGTCCCATG TTAACAAGCT TCTTGA

SEQ ID NO:119: (Length of Sequence = 434 Nucleotides)

TTTTTCGGTT AAAAAGGCC AAAACTTTAT TTAGTTTTCA GGGAAATATA AGATGCATGT AAACATAAAA TACAAAACAA
AACCCAAATC TTACAGTCTA GAAGCATGCC AAGACAGAGC ATTTTCTGCA GACCAAAGAG TCCCGTCAAA GTGATAAAGG
ACACCTGGAA AGTGGCAGGC CAAGGGGCTG GTCCCTTCCC CAAGGGCACT GCATTTTGT GATGAGATTA AAAACAAACC
AACTCCACTA TTA AAAAATGC TAGAAACATG GGATAGTTTA GCACCACCAT TGATTCCTGGC AAATATTTCA GCACTCACAT
CGACTGCACT GAGTTTAATG TCCTTTCTCC AGTTTCTCTG CTGAGGAGGG AAGGAGGGAA ACCTGGGCGG AAGGGGCTCC
TCCTGACCCC ACAGGGCCAC TAGGAGCTTG GAGG

SEQ ID NO:120: (Length of Sequence = 276 Nucleotides)

AGGAAGTGT AGCAAATGCT ACCATGTGGA ACACTCAACT TTATTTGCTT TATTTATATA TTTAACAATT CTAAAGTATT
TACTTCTTGC TTTGACAAAA AATGAAAAAT ATAGGGGCAC TGACTGACTC CTCTTAGGA GAAAAGGGTT ATATGTACAG
CTATGGAGAG TTACGGTCC CCCTTAACA AAGGCAAATA TTAATAAAAA AGGGCTTCAT CGGTCAAAAA AGGGCTAAGA
GCTGCAAGCA TTTATTCACA CTGTACATCG GGCCCC

SEQ ID NO:121: (Length of Sequence = 554 Nucleotides)

ATTTCTTCC TTAATCATAT CTGATGCTGG GATGTGGTA ACCCCAACT GAAGGCAGCT GCTAAATCTC AAATGCTAAA
AAAATACTGC AATTTTGACA TCAGTGAGTC AGATCAATAC ATCCTCTGGG GCTGATTTTG CTTACAGTT AGGATGAGCC
ATCCTTAAG CTGCAGGCTC AAATGGGATT AACTGAATC TATACCTGGG ATGGGCCATG GACTGAGCTG TCCATGCAGA
AGGACCAGGC TGTCCATGCC TTCCCTGCCC TTTTACTCAC CACTGCACAG CAGCCCCAGT GGGCCTACTG CACATGTCTA
GGAGAAATCA CTCTAAGAAA ACCAACAGGA ACAGGCTTTA GGCAACAAGA GACGTCTCAC TGCATCTCCT CCCACGTCAG
AACTTGAGTA CTGGGTCTTT GCAGCTCAGA GCATTCCTCC CTTCCCTTTC CTGCCCGAAA GGCTGCCTT TTCTGAGAC
ATATGGCACT CCATGCTGCA AGTTTCAAGC AGATGCAGGT TCTTATGGGG CTTTTTGCTC AAAGAGCTTT GGT

SEQ ID NO:122: (Length of Sequence = 238 Nucleotides)

CACCTAAGCA GGTAGACATC CGCAAAGTCA GATGCTTCC AACATGACAC CTGAACATCT TCCTTTATGC AACACCCAAA
CATCTTGGCA TCCCCACCCC AGGAAGTGG GGGAGGAGGT TATGATCCCT GGGCGCTTCG GCAGAAATGGA GAGCTGAGGT
GTCCCTCCCC TGCTAGTCAC CTACCAGGTG TCTGAGCAGC TGCATGCTCC CTGGCTCAAG TGGGCACTGT ACCTTTTG

SEQ ID NO:123: (Length of Sequence = 244 Nucleotides)

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SEQ ID NO:112: (Length of Sequence = 398 Nucleotides)

CTGATCTGAC AGGAGGTGTA GGTACGGCAG TAATGGAAGT SATGGGGAAC AGCTGTAAAT ACAGATAAAG CTTTACTCAC
 TOGCCCCACC ACTGCTCATC TCCTGCTGTA CTGCCCCAGTT CCTAACAGAC AGCAGACAGC TACTGGTCTG TSGCCCAAGG
 GTTGGGGACC CCTGACATAG ACTAAACAAT TCACAATGTT TATATTAAC AACTTATTCC AAGTTTCCAT TTTAGACTCT
 GGAACATCTG ACATGGTGAA TCCACAGGTA GTAAATSGGA AGGGAGATAA CAGACAACCT GACGGCCGTG GAAGACGCAC
 TGGGCGGGCA CTGGTGACGG GTCTGGGGAC AGACTTCACA TCTCCAGACT GGCACAGTGG GCTCACACCT GCCTCCCA

SEQ ID NO:113: (Length of Sequence = 444 Nucleotides)

ATCAGTGTCA GTGTCTAACA GAAGGGTCTG TTAAGGATGC TTCGATTTA ACCAAAAGAT TAAGCTTCAG AAACAATCTA
 ACATACTCAA AGGAGCACCA AATTATCAAC CGGCTACAAG GATGCAAAGG ACCTAAACAA CAGATGTCAA AGGGCTTGTA
 AAAACTGGAG CCAGCAACCA TTCCACTTGA AGGAATCCAT CTCAGGGAAA TGCTGGAATC CACACACAAA AGCAGGTGTG
 CAAATAATCA CTGCAGCAG CCTTCTAATA GTGAACAACA GAGGCAATCC AAATATCCTT CAACAGGGAA CTGAGTAAAT
 ACCAACTATG GGCATATCCA CATAAGGCTC TCTGCAGTCA TTA AAAAGGA TTGCACCTAC ATGCATGTCT GCCATGGAGG
 TCTTTCAGGC CAATGGTTCC ACTCGGAAGG GCAACCACCA ATTA

SEQ ID NO:114: (Length of Sequence = 472 Nucleotides)

TCGGGCCCCA ACGGAGACCT GGGGATGCCG GTGGAGGCGG GAGCGGAAGG CGAGGAGGAC GGCTTCGGGG AAGCAGAATA
 CGCTGCCATC AACTCCATGC TGGACCAGAT CAACTCCTGT CTGGACCACC TGGAGGAGAA GAATGACCAC CTCCACGNCC
 GCCTCCAGGA GCTGCTGGAG TCCAACCGGC AGACACGCTT GGAGTTCCAG CAGCAGCTCG GGGAGGCCCC CAGTGATGCC
 AGCCCCTAGG CTCCAAGAGC CCCCACCGG GACCCAACCC TGCTTCCTG GGGCTAAGCT CTGGCCTGGG GCACTCACCC
 CCTGGCTTAG ACAACTTCTC AAGGGCTTGG CCTTCAGGGG AOCCTTGTGG GTCTTGCTT GCTGGGGCCA CCTTTTCTTG
 CTGGGGGCTT CCCCTTTGGC CTACCTTGGG GCCAAGCCCC TACCAACTTT GGATTGCCCT CTTGGGGGCC AA

SEQ ID NO:115: (Length of Sequence = 293 Nucleotides)

CINGGGGCCA TGTTGGCTGAT TTCCATCACC TTCCTTCCAT TKGCTAOGGC GACATGGTGC CCCACACCTA CTGCGGGAAG
 GGTTGTGTCG TKCTCACTGG CATCATGAGA GCTGSCITTA CCGGCTCGT GGTGGCTGTG GTTGCTCACA AGCTGGAGCT
 CACCAAGGCT GAGAAGCAG TGCACAACCT CATGATTGAC ACTCAGCTCA CCAAGCGGT AAAAAACGAG GCTGCTAACG
 TTCTCAGGGA GACGTTGGCT CATCTACAAA CATACCAGAG CTGGTGAAAG AAG

SEQ ID NO:116: (Length of Sequence = 448 Nucleotides)

TTTGAAAATT TAGAGGATAT TTATTTCTCA GGAAGGTGCA CAACAGCTGG CAGGCACTGC TTTCCCTGCT CTAGGGGATT
 CCTCTCTCCT TTCCAAGAA ATCCCCCTCTC TTCCTAGAAG TGCCCATGGG AGGCTGGGAT GTGAAAAGAA ACCATACACA
 ACACTCCAGA GCCTTAAAAA AATAAAGCAA CAACCTCCTC CACACGAATA CACTTACAAA ATAAATAGAC GGATAAAGA
 GAGGCCAAGT GCCTCCCATC CCGGCTGTAG GGCTGCTTGG GGATAGTGGG GCTGGGTGGC TCGGTCCCAC TTCTCCAGC
 CAGGATGATC CAAAGGCTAA ATGGGATGGA AGGGCCCTGG CTTCAGAGA GAGGGTGGGG CAGGCCTCTC CTGGTACTCA
 GCAGGGAGGA CACTGGGGCA CGGCTAGGGG TCCAAGGGCC ACTTAATA

SEQ ID NO:117: (Length of Sequence = 551 Nucleotides)

GAGACGGAGG CTCGCTCTGT CCCCCAGGCT GGAGTGCAGT GGGAGATCT CAGCTCACTG CAAGCTCCGC CTCCCGGGTT
 CAGCCATTTC TCCTGCCTCA GCCTCCCGAG TAGCTGGGAG CCAGCGCGCC CAGCCTAAAA AACTTTTCAA GTCAATATTA
 CTACGATTTA ACATTAGAGT GTGGACATGT GATTTAATCG CTATAGCTAA AATACGTCAA ATATACGTTG TCATGTGCTT
 GAACATGATG CTAACCTGA CAGGATGAAG GAAAGTAATA TTCCTTCAGT GTAGTTCAGG AGAGCATTTG TTTTCTTTTC

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SEQ ID NO:106: (Length of Sequence = 355 Nucleotides)

GGATGAGGTC GCCGGGATCG TGGCTGCAAG CCACTGCAAG ACCAACATCG TCACAGCTTC CGTGGACGCC ATTAATTTTC
 ATGACAAGAT CAGAAAAGGC TGGCTCATCA CCATCTCGGG ACGCATGACC TTCACGAGCA ATAAGTCCAT GGAGATCGAG
 GTGTTGGTGG ACGCCGACCC TGTGTGGAC AGCTCTCAGA AGCGNTACCG GGCCGCCAGT GCCTTCTTCA CCTACGTGTC
 GCTGAGCCAG GAAGGCAGGT CGCTGCCTGT GCGCCAGNTG GTGCCCCGAGA CCGAGGACGA GAAGAAGCGC TTTTAGGAAG
 GCAAAGGGCG GTACCTGCAG ATGAAGGCGA GGGAC

SEQ ID NO:107: (Length of Sequence = 273 Nucleotides)

GTGTCTCTTT TAAAGAAAAC ATACTTTATT TTGGTCTAAA TTGTGAAAAT ACCCAAAACA TTTGATAGAA ATTGAACCTCT
 GTCAACAGTG TTTATTTATC TAAGATCAGG ACAGTTCCTT GAGATCATAC TGTTTTATTA CTAAGTTTGG CCTTTGTTT
 ACAAAATGTA TGTTCATATT TATTTGAATT TTAAGATTGG TTAATGTTA ATGAAAAGCA ATCCAATTGT TANTTTTTAG
 TAGTGCCCTT TCTCTGTATG CCTTAATTTT ATT

SEQ ID NO:108: (Length of Sequence = 359 Nucleotides)

ATTTTATTTT CTTACATCGA AGAAAATGTT AAAGAGTATC TGCAGACACA TTGGGAAGAA GAGGAGTGCC AGCAGGATGT
 CAGTCTTTTG AGGAAACAGG CTGAAGAGGA CGCCACCTG GATGGGGCTG TTCTATCCC TGCAGCATCT GGAATGGAG
 TGGATGATCT GCAACAGATG ATCCAGGCCG TGGTAGATAA TGTGTGCTGG CAGATGTCCC TGGNCGAAA GACCACTGCA
 CTCAAACAGC TGCAGGGCCA CATGTGGAGG CGGGCATTCA CAGCTGGGCG CATGAAAGCA GAGTCTTTG CAGATGTAGT
 TCCAGCAGTC AGGTAAGTGG AGAGAGGCCG GGATGAAGG

SEQ ID NO:109: (Length of Sequence = 360 Nucleotides)

TTTATNAAAG CAGTTAACT TAGCATTAAA TAACACTCTT TAAATGGTAC ACCTATGAAG CAAGAGTTAA ATATAAACCC
 AGTCTAATCC TGTACACTTG TGATTAATTG TGACAATCTT AAGTTGCTCA CTCTTTTCCC ATTTACCAAT TCAGAGAAAG
 CCCGTTTCTT GTTTTCTCTT CACCACTTTG CCTTGGCATC ACACCAACCC TGCTGGGGC TTCAGCTGCA GATCCTCCCC
 AGCCCTCTCT CCCAGCTGGG CTGACTCCAG TCCCAGCCCC AGTCTCCACC AACTGAGCAG CGTACGCAGG GTTGTGTCTG
 GCTTCCAGCA TCTACCAACC CTTAGAGCA ACTT

SEQ ID NO:110: (Length of Sequence = 364 Nucleotides)

TCTCAGAGGG GCTCTGGGG TCAITCAAGG GGGACTTCTA GCTTCTCTCT GGAACCTTT GTCCAGAGCA AAGCCAGGTT
 TCCAAGGTCC CCACGGCAAG GCTGTGGGT GCTGGCAGCA AGAGGTACAC AGCAGTCTC CCAGCTCACA GCAGTGACCT
 CAGATCTCCA GCAGCAAGGG CCGCACTCTC GTGCCACAA GGGCCTTGA GAAATNCTCC GGTCCCTGGG NCTCCCCGG
 CAGGAGGGG GGGCTCTG CTTGCAGTGA GGCCACAGCA CTAAGCGGCT TCAGTCACAT GCTTTTCAGG TGAATCACTC
 CAAATTCAGT GAGGAGGGCC ACGACAAGGA AGTTCAGGTA GAAG

SEQ ID NO:111: (Length of Sequence = 455 Nucleotides)

TTTTTTTTT TATATTTTAA ATGGAATTTA TTCTATCAAC TGCTGAGAG GACACAATGG GGGAGGGGCT TCGGACCACA
 GCAGGAGCCC CGACTGCCA CCTGAGGGCA GGGAGAGCCT GACCCATTG GCCAGGGCC TGGCTCTGTA ACCATTAAAC
 TCTTCCCCA ACTAACCA ATGAAAACAC CATTCCAGT GACTGGGCTG TGTGTTGCC TCTGTGACAT GGGGACCCCT
 GACCCTAGGG GTCTCGCTG AGCCAGACCT GAGGGACCA CCGCGTAGG ATGGAGGAAG GTTTAGGCCT CCCTTTTGCC
 AGCCAACGCC GGGGGTGGG GCAGACCCTG GGAGTGGGCC TTACAGACCA GCCACAGGTA TTTCTTAGGC AATTTGACAC
 ATTTTATTAC AAAACCAATC TACATTCATT CCTAAAAGGG TCATTTTCAG TAAAA

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CCTTTTAATA ATAATTCGTC TGCTGCTGT GACTAGAAC CCATGCCTAC TGCTTGGGGT ATAATGTAGT AAATGTAGTA
 AAAACAATAT CGCCGGGGCG CGGTGGCTCA CGCCTGTAAAT TCCAGCACTT TGGGAGGCCA AGGAGGGCGG ATCACGAGGT
 CAGGAGAGCG AGACCATCCT GGCTAACATG GTGAAACCCC GTCTCTACTA AAAATACCAA AAATTAGCCA GCGGTGGTGA
 TGGACGCTG TAGTCCCAGC TACTC

SEQ ID NO:100: (Length of Sequence = 333 Nucleotides)

AAAATGCTCA CAGTGGTCTT CTCGGCCCG TGAGCCTACA GCTGATCTTG TCAGAGACAA ACGTTAGTTT TACTGAGTCA
 CCCAGAGCCC TGCTGCTGGT CCTGAGGGTT TGTCCATGG GACAGTCTCC ACAATTCTCT TGGGGAAGGG CCACAAATCC
 CACAGTGTGT COCAAGAGGG CTGGAGTAGG CGGAGTCCCC AGCAGCTGTG GCATGACCAG CCATCTCTCT CAAAACAATT
 GTTAACAAGC CTCTGCAAG TTAAGGTTCC ACATGGTAGC CGTGGTACAG AGGCATTTCT CTAGGGTGGG AGAGGCTGTG
 GCTCTACACC AGG

SEQ ID NO:101: (Length of Sequence = 156 Nucleotides)

CTCTGACTTT CCTGTGGTIT TAGAGCCAAG CTCAGGTAG TAGGCOGTAG GGNCITATTT TATTTTCAAA CCCCCATCCT
 CAGAGCGCAG ATACATGCAG AGGCTTCTGC CAGGCTACCA CGGGCCCTTA GTGGGAACAG GTTGAGACCA GCATT

SEQ ID NO:102: (Length of Sequence = 331 Nucleotides)

CGAAAAGGGG NNNIATGGCC ATCTTTTATC AGAAAAAGTG AAAAAACGGG AATTAAAAA ATGAATTTTC NNTCTGACTT
 TATTINNAAT TACACTTTCT TTTTINNAAT ACCAATACAC TTCTTTTGTG GATGACAGTA TTAGGAAATC CAATTNNACA
 AAAAATACTA CATCTAGTCT GGGGTAGATA TATTTATTTT TGGTAACATA CATTAAGTGG CACTAATTAC ACAGTAACTA
 TAAGGTAACT AACATGAAAC CACAGAACTG TAACTCTGCC ACAGCTGCAT GAACITGGGC TTTTCTGGTT GAGCCCATTT
 TCAAAAACT G

SEQ ID NO:103: (Length of Sequence = 316 Nucleotides)

AGCCACTGCG CCCACCCCA TTTCGGTGIN ANCTCAGCTC ACTTCAACCT ACCCCTCCCA AGTTCAAGTG ATTCTCCTAC
 CTCAGCCTCT TGAGTAGCTG GGATTACAGG GGTCGCCAC CAGCTGGGT GATTTTCTTA TTTTGTAGTG ACATGCAAT
 TCACCAGGTT GGCCAGGCTG GTGTGAAGT CTTGACCTCA GCTGATCCAC CGTCTCGGG GTCCCAAAGT GTTGGGATTA
 CAGGTGTGAG CCACCACACC AGGCCCATAT TTCTTTTGTG ACATGCAGGC AATGTGGTG GGTGTGTCTG TTAAGA

SEQ ID NO:104: (Length of Sequence = 308 Nucleotides)

GTTTTTCCTG CATCTATTGA GATAATCATG TGGTTTTTGT ATTTGGCTCT GTTTATATGC TGGATTACAT TTATTGATTT
 GCGTATATG AACCAGCCTT GCATCCAGG GATGANGCCC ACTINGATCAT GGTCGATAAG CTTTTTGATG TGCTGCTGGA
 TTGTTTTTGC CAGTATTTTA TTGAGGATTT TTGCATCAAT GTTCATCAAG GATAITGGNC TAAAAGTGTG CTGTATTCAG
 GAAACCCATC TCAGTGCAG AGACACACAT AGGCTCAAAA TAAAGGGATG GAGGAAGATC TACCAAGC

SEQ ID NO:105: (Length of Sequence = 355 Nucleotides)

GGCCTTCCTC AATATGTAGG CGCCACTTTT TCTCCCTGTG CCTCACCTG GTCACCCCTC TGTCGCGGAN ATCCCACTGT
 CTCCTGCGGT GTCCAACTT CCTCTCTTA GGAGGACACA AGTCAGATTG GATTAGGGCC CACCCCAATG GCTCAATTT
 AACTTAATCA CCTCCCTTTT GTTTGGGCTT TTTAACTTAA TCACCTCTTT AAAGACCTTA TCTCCAATA AGGTTTCATT
 CTGAGGTATA CTGGAGGTTA AGACTTTAA ACACGAATTT GGAGGGGACG TAATTCAGCC CATAACAATA ACAATAATGA
 CATCTTACAA CTTACTGCCA CCACCAAGCT TGCTG

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SEQ ID NO:93: (Length of Sequence = 364 Nucleotides)

GCTTTCAAGG GAACAAAGAA TCGGCTTGGC AGTGCCCTGG AGAAGGAGGT GGAGAGCATG GGGGCCCATC TTAATGCCTA
 CAGNACCCGG GAGCACACAG CTTACTACAT CAAGGCGCTG TCCAAGGATC TGCCGAAAGC TGTGGAGCTC CTGGGTGACA
 TTGTGCAGAA CTGTAGTCTG GAAGACTCAC AGATTGAGAA GGAACGTGAT GTGATCCTGC GGGAGATGCA GGAGAATGAT
 GCATCTATGC GAGATGTGGT CTTTAACTAC CTGCATGCCA CAGCATTCCA GGGGCACACC TCTAGCCCAG GCTTTGGAGG
 GGCCCACTGA GAATGTCAGG AAGCTGTCTC GTGCAGACTT GACC

SEQ ID NO:94: (Length of Sequence = 423 Nucleotides)

CTTCATACTA GAACTGTCTG CCATCTTTAT TTCTTTGTTT TCAGGAAAAT TGGAGAGAAA AGTATTTCTT TTTTAAAAAT
 GATTATTATA CTTTAAAGTC TGGGATACAT GTGCAGAACG TGCACTTTTG TTACATAAGT ATACACGTGC CATGGTGGTT
 TGCTGCACCC ATCAACCCGT CATCTACATT AGGTATTTCT CCTAATGCTA TCCCTCCCTC AGCCCCCACC CCTCCAACAG
 GCTCCAGTGT GTGATGTTCC CCTCCCTGTC TCCATGTGTT CTCATTGTTT AACTCCCACT TATGAGTGAG GGACATGCAG
 TGTTTGATTT TCTGTCTCTG TGTTACTTTG CTGAGAATGA TGGCTTCCAG ATTCAATCAT GTCTTGCAA AGGCATGAAC
 TCATCCTTTT TATGGCTGCA TAG

SEQ ID NO:95: (Length of Sequence = 405 Nucleotides)

AACAGCCCCG GATCTGCATA GCCTGTGAAA GCCCACGGGG ACATCAGTAA CCTTCTGCAG CCACCATCCA ATGCCATTAC
 TGTAAGTGA GACTTGGCCA CTGTAGCCTG GGCTGTCTGC AGGAGCTCTT CAGAAAGGCA CATGAGGACC ACGGTTTGCC
 TCAGTTTCTG GTAAACACA AGGTCTGGAG TGCCCTGCA AAGGTTATTG ATGGACTTCC TGCCAGTGAC AGAGCATGTC
 TATIGCAAAC AATCTCTCA GTTACGTTCA GCACTTAAGA ACGGCTAATG NCAATAGGAT CTTAGCAAC TTTTTCACAT
 CATAGAAGGT GCAATCGCTC ACTTGGGAAC ACTACTGAGA GTGACTTCTC TTTTAAATTT GAGTAGCAGA TGAAAAATTA
 AAATT

SEQ ID NO:96: (Length of Sequence = 173 Nucleotides)

GAAGACAATA CTGATGCCAG CTCCTTGTA TGTGAAATC TGTACCCAA CCTCTGGATT AGAATCTCCA GTTGTCTACT
 GTAAATACTG GAATTACAGC AAAGGATATG GGGACTGGGC TGCTTTTCTG TATTGTACAA GCACTATTCT AGATATTAAA
 GAAATTTAAC CGC

SEQ ID NO:97: (Length of Sequence = 337 Nucleotides)

ATGGCGCCCT ACAGCCTACT GGTGACTCGG CTGCAGAAAG CTCGGGTGT GCGGCAGTAC CATGTGGCCT CAGTCTGTG
 CCAACGGGCC AAGGTGGCGA TGAGCCANTT TGAGCCCAAC GAGTACATCC ATTATGACCT GCTAGAGAAG AACATTAAAC
 TTGTTGCGAA ACGACTGAAC CGGCGCTGA CCTCTCGGA GAAGNITGTG TATGGACACC TGGATGACCC CGCCAGCCAG
 GAAATTGAGC GAGGCAAGTC GTACCTGCGG CTGCGGTCGG ACCGTGTGGC CATGCAGGAT GCGACGGSOC AGATTGGCCA
 TGCTCCAGTT CATCAAG

SEQ ID NO:98: (Length of Sequence = 212 Nucleotides)

TGAAGCCCAA GNAGTNTGTG AAGACAGAGA ATGACCACAT CAACCTGAAG GTGGCCGGGC AGGACGGCTC CGTGGTGACG
 TTCAAGATCA AGAGGCACAC GCCGCTGAGC AAGCTGATGA AGGCCTACTG AGAGAGGCAG GGCTTKTCAA KGAGGCAGAT
 CAGATTCAK TCGACGGGC AGCCAATCAG TGAAACTGAC ACTCCAGCAC AG

SEQ ID NO:99: (Length of Sequence = 26 Nucleotides)

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TCCCCAGGCC TGAAACATTT CTCAGGATTA CTTCTGACCT TCAGCCCCAG CAGGGCCAGG GCCTGGGCTC CTCTGGTCTA
GGATGGGCCC CTTTGGCCAA AAGGGCCTTC AGCTAAGGCG TTGGGTGGG CGGGGAGCCC

SEQ ID NO:87: (Length of Sequence = 280 Nucleotides)

GCCTTTGCTG CTTATTGCGA TOGATGGTGA AAGAGATGTC AGGAGCACTT CTCTGCTGAG GTGGCTGAGA CGAAGAGGAC
TCTGCTGCCA GCCTTGCCGC ATACCTGGCA ATTAGCCTGT GTTCTTCATC AAGCCGGTTT GAACTCTCAA GCATGCTCCT
GGTAATAAAA GGACTTCCTG AGGAGGGAAC AGAGTGNAG AACAGGGTGT CGTTCATGCT GGTTACAGGT CTGGGAGGCA
CGATGTGAGC CAAGTTGAGT GGCTTCTCAG GCTGATCTGG

SEQ ID NO:88: (Length of Sequence = 446 Nucleotides)

CCTGGTCTC TTACACCCYC TCCACCCGA GGCTCCCCAG AGATAGCAGA GAATCGAAG AGGTGCGCGG GGA CTGGAAA
GAAGTCCNG NAGGCCGCT TCGAGTCTA CACCCAGCC TGCTTCCAG CCTACAYCCA GACCCAGCTC AGACCTTCGT
GACCACCCCA TCCCTTTCTC CGGCTGGCTG GGTCGGGGG ATCCCTCTCT GTGCTGGCT TCCAGAGGCA GGACAGGCCT
CCTGGTAAGC CGCAAAGTT GCTGACCTCC TGACTTCGTC TGCCPTTAT TAATATCTGT ATTGCTGATA ACGTGTCTCT
TGACTATGTG TCCAGGTCA TGTCACAGT CATGGAGAAG CCCGTGCCAC AGTGACCTT CCATACTTC TGGGGGGGCT
GCTCTCCATC TGGATCGTAG GAGGATATAG GTGTGTTCTG GACCAT

SEQ ID NO:89: (Length of Sequence = 384 Nucleotides)

GTCCCTCTG GGGACTCTRT TTCCCCATTT ATTGCTGCTG TGTCCTINAC CAGTTCCTTG CAGGATTCCT TCCCTTTAAA
ATGCCCTTAA ATCTAGCTTT GCCTTGGAGA CCCCAGTGGG TGCTGCTCCT GCCGTPTTCT TCTGCGCAAG CCTGAATCAA
TGTTTCATCT CCAACCTCT GCCAGTTTG CCCTCAAG CTTGTGGCT CAAGACTGTW AGCCTGGCAG AGCCGCGNGG
TGAAGGAGA AGCTCTTGA GCAGGCAGGA TGCCACCGCT GCTTCAGCTT GCCTCCTGC CCAGCTACCC TTTGGCCCCA
TTGGGCCCTC GIMTGCCTCT CCAGGATTGT ATGTTTCAAG NCTTGCTCTG TGTTCCTTG TCTG

SEQ ID NO:90: (Length of Sequence = 344 Nucleotides)

TCAAGCTGGA AAGGGCTACT ACCTCATGCT GGAAAGGGCT ACTACCTCAA GCTGGAAAGG GCTACTACCT CAAGCTGGAA
AGGGCTACTA CCTCAAGCTG GAAAGGGCTA CTACCTCAAG CTGGAAAGAG CTACTACCTC AAGCTGGAAA GGGCTACTAC
CTCATGCTGG AAAGGGCTAC TACCTCAAGC TGGAAAGAGC TACTACCTCA AGCTGGAAAG GGCTACTACC TCAAGCTGGA
AAGGGCTACT ACCTCAAGCT GGAAAGAGCT ACTACCTCCA AGCTGGAAAG GGCTACTACC TCATGCTGGG AAAGGGCTAC
TACCTCAAGC TGGACAGGGC TACT

SEQ ID NO:91: (Length of Sequence = 364 Nucleotides)

GCCCCAGGGT GAGGGCTATG AGGGGTCAGG GGTGAGGTTT CCCAGGACCC TAGTCCTTGT CCCCTTCCCT GTTGCTAAAT
AAAAGTGAAT AAATACTAAA TAAATACAC TGGGGCCAG GCCCTCCCTG CCTTCCCCCT CCTCCTGTG ACCCGCAGCA
GAGGGGCGAG TTATAGATGA GGGCTGTCTG TCAGCCCCCT CCATCCACTA ACCCATCACT GCCTCCAGG GCAGGAAACC
AGGGCAGGGC CAGCCTGCGC ATTAGGGCAG AGAGGAGGGG CAGGTCTCAC GCCACAGCC CCTTCCACT TGAGTCTTAG
CATGAGGCAG CAACAGAAGC TCTCTCTTCC TCCCAGCTAA GTCC

SEQ ID NO:92: (Length of Sequence = 218 Nucleotides)

ATTTAATAGA AAATTAAAT AATAATAAT ATGAAACAGA CTGATAACGC TGAGCTGGG AGGCCAGGC CAGTCTAGTA
CAAAGTTAAG GAGGTAGGA GGATGGTGGG GAGGAGGGG GGGACTACCC TGCAGGACGC GGGAGGCTGC TCAGACTGTG
GTGATGTCAG GAAGGGCCGC AACTTTGGC ATGGACGATG CACTAAAAA AGAGAAAG

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ATGATTTCCTT GCCTGINATA ACCTATGCAC TCACAAAGAT GAACCTCTCTG AGAGGGATGA GCAAGAGCTT CAGGAAATCC
 GAAAGTATTT CTCCTTTCCT GTATTCTTTT TCAAAGTGCC GAACTGGGC TGGAGATAA TAGACTCCTC AACCAGGAGA
 ATGGAGAGCG AAGATCACC GCTTATCGC CAGCTAATTG ACCTGGGCTA TCTGAGCAGC AGTCACTGGA ACTGTGGGGC
 TCCTGGCCAG GGATACTAAA GCTCAGAGCA TGTGGTGGG ACAGAGTGAA AAGCTGAGAC ACTTGAGCAC ATTTTCTCAC
 CAGGTGTAC AGACTCGCCT GGTGATGCA GCCAAGGCC TGAACCTGG TGCACGCCA CTGCTTGAC ATCTTTTATT
 AA

SEQ ID NO:81: (Length of Sequence = 246 Nucleotides)

CATTTTAAAT AGAGACGGGG TTAAACCATG TTGGCCAGGC TGGTCTTGAA CTCTTGATCT CAGGTAATCC ACCCACTATG
 GCCTCCAAA GTGCTGGGGT TACAGGTTTG AGCCTCTGTN CCCGGCCCGG CCAAAGACTG CCTATTCTAA ACGTGTGTA
 GGACGTGGAN CAATCACAGC TCTCCINICT TTCCAGTGGG AGTTTAACAT GGCACAACCG CCTGAAAACC GTTTGGGAT
 TTCTGT

SEQ ID NO:82: (Length of Sequence = 394 Nucleotides)

GGGAACCTC AGCAAAATAT AATGGTACCG CTATTATCAG CCTGTTCGA GGGCCAGGGA TTTTGGGGGA GGTACAGTG
 TTCTGGAGGA TATTCCTCC TTCCGTGGG GAATTTGCTG AAACATCAGG NAACTGACA ATGCGAGACG AACAGTCTGC
 AGTCATTGTA GTAATACAGG CTTTGAACGA TGACATTCCC GAGGAAAAA GCTTCTATGA GTTTCAGCTC ACTGCAGTCA
 GTNAGGGAGG AGTTCTGAGT GAATCCAGCA GCACINCCAA CATCACGGTG GTGGCCAGCG ACTCTCCCTA TGGCCGATTT
 GCCTTTINAC ATGAGGCAAC TCGAGTGTG AGAAGCACAG AGGNTAACA TCACAATCAT CCGTCCAGT GGAG

SEQ ID NO:83: (Length of Sequence = 308 Nucleotides)

ATAAGACCAT TGGCAAAGG AGAATTCATG AACTGAAAGA TCTGAAGTAA TTTCCAGAA TGTAATGTTA AGAAATAAGT
 TAAAAGGCAG AGCATAATGA GTCTAACATG TGTGATTGAA GTCTTATAAG GAGAGAATTA AGAMCAGGCA ATATTTTAAA
 GGRATAATGG AGAAAATGGA ATAATTGATG AAATATGTGA ATATATATAG GGACCATATG CATATGAMGG CCGGGGGTTA
 AATAAAACGA AATCTACTTG TACATACITT ATGGGATTCC TGCAGCCCGG GGGGATCCAC TAGTTCTT

SEQ ID NO:84: (Length of Sequence = 313 Nucleotides)

CTTTAACTTA ATGGCAATTA AACTCACTG GCAAAAAA TCACTAGAGA TGTGAGTCCA TTATCTTACC AAATAGTGA
 TTTTACCAT CTTTACCTA CACCTTGAG TAAGGTGGAA TAGGTAAAG TTACTGGCAT AATAACACTT CATTGAATTC
 ATGATAGTAT TTAACATGTT AAACTGTTT AGTTGAAAAG TTCACATGCA ATTTATAATT TAAAAATATG CTACATATAT
 TTCATAAAW TACAATAGGT CATACTARAC TTGACTAAA ATTAAGAATG TKTTCTKTC ATAATAATGC AGG

SEQ ID NO:85: (Length of Sequence = 303 Nucleotides)

TGCTCOGTTT ATTGCTCTAT TCAATGACCA CGAGCGAATT ATAAAAAGAC ACCAAATGTC TCTGTCTGCC GTGGGATAAA
 TATTTAAAGT CAGCAATAAA GTCACGTGGC TOCAAGRTAA TACATGTTGC CAAAGAGTCA TGCA TGCCCT CCTGATGGGC
 TCTCAACACA CGTATGGWCA TGGGAACACA CGCAGAGCAA CACGAGTAT GAACTTSTGG GAAGGCTTTA CCACAGTGAC
 ACAGTAAAT GTCTCAGTA GATCTGRGCT GAGTCCCCAC CCAAACCTTG AGCTCCCTT CCA

SEQ ID NO:86: (Length of Sequence = 380 Nucleotides)

AAAACAAACC AGCTTTAATA CCAATATAGT TCCTCTCTAA ATACCGTGT TCCAGGACA AATGCAGGGG CAGGCTCTTG
 GCAGAAAGAG TAGAAAGGAA ATGTGGAACA AAATGGAATG GATGGCCAG GCCAGGGTC CTGCTTGG GCACTAGGGA
 CTGGGCTGCC TCGGGATGG GGGAGTGACA GCAGTCCCC CTGGTCCAGT TATTGAGAG GCGTCGGGG CTCCCTCCC

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GTGCTCAGTA AATACAAATT GGATGGACTA GAGAGATAGC CCGAGGACA CTGCCAAATA AATAACAAAT TGTGCAAGCA
GCAGGCOGCT GTAATTAGAC CAAGGAGGAC AGTCAGTTAT TAATATCAGA CACGTGGCAG GGTAAACAGC CACTGAGGGT
GGGTACAATG AAGAGAGTCA CTTTCTGCAC CCTCAGGAC TTCCCTTGTC ATGGCCTTCT AAAGAGGGCT GAACAGCACC
AAGTGCCTTC GCTGCCTCTG GTTCTGCTG CCTCCGCGT GCCTTGGGTG CCCCACT AGGGCCCTGG GTCCCTCCCA
TGTCCCCCTC CCTCTACAA CCCCAGCC CCTTATCTGG CCAGCCATTA TGATGCCTAT CAGTATGAGG CCAGATGAGA
GT

SEQ ID NO:75: (Length of Sequence = 454 Nucleotides)

GGACCCGGG CCGCGATGT GCGCCAGTAC CTGCTCTCAG ACAGCCTCTT CGTGTGGGTT CTAGTAAATA CCGCTTCTG
TGTTTTATG TTGGTGGCTA AGCTCATCCA GTGTATGTG TTGGCCCTC TTGAGTGAG TGAGAGACAG CATCTCAAAG
ACANATTTTG GAATTTTATT TTCTACAAGT TCATTTTCAT CTTTGGTGTG CTGAATGTCC AGACAGTGA AGAGGTGGTC
ATGTGGTGCC TCTGGTTTGC CGGACTTGTG TTTCTGCACC TGATGGTTCA GCTCTGCAAG GNTOGATTG AATATCTTTC
CTTCTCGNOC ACCACGGGA TGAGCAGCCA CGGGTGGAGT CCTGTCCCTG TTGGTTGCC ATGCTGCTTT TCTGCTGTG
GACTTGCGGC CGTTTGCTA TTACCGGGA CACCAGGAA TGCACACCTG GCTT

SEQ ID NO:76: (Length of Sequence = 313 Nucleotides)

GCFTTATAG CTAGTTGTCT AAAAGTGTG NITATTAAT AATCCACCTN TTTCCCCACT TAAACATCC CTCTTACCAT
ATACTAAAT CCGTAGCCC TGGGTCTGTT TCTGACTCT CCGTCTGTG TGACCCCTC CAGGTACAC TGAGTGAGGT
AATGGTGGG TGAGAATCT CTGGGAATCT GGCAGGNTCA CCCNGAGCA GTCCACCCN CAACTCATT NCACTGTTCA
GAGTGGNCTG AGTGNCTCA CACATTCAT CTGCCAATG CACTTTAGGA ACTGTCAAAT TCCAAAGTTT CAA

SEQ ID NO:77: (Length of Sequence = 446 Nucleotides)

CTCAGCGTA GCGCTAAGTC GTTTTTCOA TTTAGGAAGC TCACAACGCA GATCTGCATT GTACGTACC AGCTGTTTGT
GAACCTTGT AAGCTGTTC AGGTGTCTT CAAGAAAGGA AATCTTCTGC TTTTGGGAGT GAATCCCCC ACTGTCTTGG
GGCTCCATT CTGCATTTT CTGACTCGA GTGTGACGT CTGGAACGAA CAGCTTGOGA AGGTGTGGC SGGTCTGGAG
TTCCGGGCA ACTGTCTCT CCAGACCTT GAGGTCTGC TTGTGACTGC TCAATGTGC TGTACAGAA ATGTACGCTC
CTGCAGCTT GTGCTCTTC TGTGGTCT TCGCTCTTC AGCTTCTCG TAGTCAAGCC TGAAGGCTT TCTAAGCTCT
AAGTGGAGCT TCTGATTAA GGTCTTTGA GCTCATCAA TGGTCT

SEQ ID NO:78: (Length of Sequence = 296 Nucleotides)

AGCGGTGGC GCAATGGAGA GAATGTGCCT GAGACAGAGC GCCTGGCTGG GGAGGAGGCA GCGCTGGNG CCGAGCTCTG
TGAGGAGACC CCGTGAATG ACAAATCATC CATCGTGGTG CGCATCGGC CCGAGGAGCG GCAGAAATAC GAGGAGGAGA
TCCGCGTCT CTATAAGCAG CTINACGACA AGGATGATGA AATCAACCA CAAAGCCAAC TCATAGAGNA GCTCAAGCAG
CAATNCTGG ACCAGGAAGA GCTGCTGGTG TNCACCGAG GAGACAACGA GAAGGT

SEQ ID NO:79: (Length of Sequence = 285 Nucleotides)

CCTTCTCTG CTGGGAAGTG ATGACTCCA GGTGGGCTT GCGCTGGGG GCTCCAAGCT GGGTCTGTG GGTAGGTGGG
GGCGGAGACT TGGCAGGGAT GACCTGTGTT AGGCTGTGTC CATGGCCAC AGGGAGGAGG CCAGGGGAAG CCCGAGCACT
GACGTAGCCA TTCCAACAG GGCTGGGCA GGCTCGTTA GCACTGTTC GGTCAACNCC CAGCATGGCC
CCCGCACTACGCTG GGGCAGGCCA GGAGACACAC TGTCTCTCTG TAGTG

SEQ ID NO:80: (Length of Sequence = 402 Nucleotides)

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AAGTGTAGGC AATTTTACAT CATCTTTTTT CCCAATCAGT TTGTGATCCA ACTATAAAAA GGAGACATAG AATACTGAAT
AAATGAAACA GAAACTCCAA GGCCAAGAAG TGCCATCTT GAAAGAGTGT TAGTGGCAAG ATATGTGACT GCAGACTAGA
TGTAGACAAA CCTGAGAAAA ACCAAGCATG GGGGAAAGGA TYCCTATTTT AATAAATGGT GCTGGGGAAA ACTGGCTAGC
CATATGTAAT TTA

SEQ ID NO:68: (Length of Sequence = 372 Nucleotides)

GCACGGTTAA AAGACCAACG TGTGTGNTC AAATATAAAG GCCACACCTT TCAGACCGAA CCTACTCAA GATCCTTTAC
TTTGCAATAA TTTGAACITG AGAACCAAAG ACGGGAGACG AATGAAAGCA AAGATGCTCA AAGAACCAAA GGAAAGACCT
GAAGGAATCC ACCTGATAG GCCACGCGTT CCACTCTGGG TCAAATGCTT CCACGATGCA GAAACCTTTT TTTAAAAAAG
TGCAAGTCTA ATTACCTACC AAGGGTAATA AAAAGCACAG CACAGGAATG ATTACAGCTG ATGGTCAAAA AACAAACCAA
AACCATTAAA AAAACAATCA GGCAGAAAAC AGGAGTTAAA TGTTTACATA TG

SEQ ID NO:69: (Length of Sequence = 389 Nucleotides)

TCTAGAACCT GGACCCACCC AGCGGTCCT TTCTTATCCC CGAGTGGATG GATGGATGGA TGGATGGTAG GGATGTTAAT
AATTTTAGTG GAACAAAGCC TGTGAAATGA TTGTACATAG TGTTAATTTA TTGTAACGAA TGGCTAGTTT TTATTCTCGT
CAAGGCACAA AACCAGITCA TGCTTAACCN TTTTTCCTT TCCTTCTCTT GCTTTTCTTT CTCTCCTCTC ATACTTTCTC
TTCTCTCTCT TTTAATTTTC TTGTGAGATA ATATTCTAAG AGGCTCTAGA AACATGAAAT ACTCAGTAGT GGATGGGTTT
CCCCTTCTC CTCAATCGT TGCATGAAAT AATTACTATG GTGCCCTAAT GCACACAAAT AGCTAAGGG

SEQ ID NO:71: (Length of Sequence = 329 Nucleotides)

GAAAAAATGG GAGGGCAGCC ATGTATTAAAT TGTACATCCA AGGAAACTGT GCGCCAGGGG TCTTGTTGT ATTTCTGAGA
AGAGGGGTGA GAAAAGGCAC TGTGTCAACA TTGTCTCTG CCTGAACGTG CACCTCCAG TGCTCCTCCA TCAATTAGGA
GAACGTCTT GAAGAATGCT GCCTCAGCTT CTGAAGAGAA GACCCAGGA CATGCATTAA TGAGAGGAGG GGAGTCACAG
CTGCAGAAGA ATAAAGCTCT CTGAGGGAGC CTGGGNGGCC CCAGTGGAGG CCTGGAGCTT GTTGACCANN GCAGCAGGAG
ACCCCTGCT

SEQ ID NO:72: (Length of Sequence = 418 Nucleotides)

CTGAGTGGC TGAGGTCAAT CACATGCTTC AGCACCAGTT CCCATCTGTT CAGGCAAATG CAGCGGCCTA CCTGCAGCAC
CTGTCTTTG GTGACAACAA AGTGAAGATG GAGGTGTGTA GGTTAGGGGG AATCAAGCAT CTGGTTGACC TTCTGGACCA
CAGAGTTTTG GAAGTTCAGA AGAATGCTTG TGTGCCCCIT CGAAACCTCG TTTTGGCAA GTCTACAGAT GAAAATAAAA
TAGCAATGAA GAATGTTGGT GGGGATACCT GCCTGTGTG GCGTGTGAG AAAAATCTAT TTGATGCAGA AGTAAGGGAG
CTTGTTACAG GAGTCTTTGG AATTATCCCT CATGTGATGC CTGTAAAAAT GACATTCAAT CGAGATGCTC TCTCAACCTT
AACAAACACT GTGATTGT

SEQ ID NO:73: (Length of Sequence = 336 Nucleotides)

CTGAATTTTT ATATGCTTCA CTTAGGCTTT CATTGAGTA GACTCTAAAA ATTCTGCCIT GCTTAAGTNC TAACACTGCC
TCTCAGATTT CAGTTTTGGA CATTGCACAA CTAAGACCTT TTAAACGCAT TTNCTTGCTA ACTCGGAAGA CACATAGTCT
GCAGCAAGAC ATTCTATAT TGAAGAAATG AGAGAAAATT TTATGCTGCA TCAGGTGGAG AGCAAGGCTC AACGGTGGTT
GCATTAGTTC CCTCGGAAGT ATTGAAAAAN CTTTGAAATG GGAAGGAAAA TTTTGTGCAC CTAATGTTCC TGAGGTACCC
AGAATGTCTG GGGGTT

SEQ ID NO:74: (Length of Sequence = 402 Nucleotides)

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AGTCCTCAAG GGCIGATTCC AACTTCCCTG TCCAGGGACT TTCTCAGCAA ACTTTGTTC TGAGCAGTTG TTOGCTTTGA
TGGTCTTAGC CAGTTTTTGG TGCAGGGGTG TTCTCTGGT ACTAGGGCTA GGGCAGCTGT TTAAAG

SEQ ID NO:61: (Length of Sequence = 491 Nucleotides)

GACACCCCTC CTGCCATGAA GAATGCCACT AGCTCTAAGC AGCTCCCACT GGAACCAAG AGCCCCCTCAG GGCAGGTCCG
GCCTAGGCCA GCCCCCOCG AGGAAGAGTC CCCTTCTCTT GAAGCAAAGA GCAGAGGACC CACCCCACCA GCCATGGGCC
CAGGGGATGC CAGACCTOCT CGAAGGAGCA GCCAGCCATC TCCAACAGCA GTGCCAGCCT CGACAGCCC TCCCACCAAG
CAAGAGGTGA AGAAGGCAGG AGAGAGACAC AAGCTGGCAA AGGAGCGCG AGAAGAGCGT GCCAAGTACC TGGCGGCCAA
GGAAGGCAGT GTGGCTGGGA AGGAGGAGAA AGGCCAAGT GCTGCGGGAG GAAGCAAGCT CCATGGAGCG CCGCTGCCGG
TTTTAGGGAG CAAACGTCTT AAAGCCGAGC AAGCCGCTT AAGCCTTGA GGAACGGCTA GCGGAAGAAG TTTGTGGAAA
ACAAGGGCG T

SEQ ID NO:62: (Length of Sequence = 478 Nucleotides)

ATCATTGAGT ACGCAGAGCT CAAACAGAC GTGTTCAGA GCCTGAGGGA AGTGGGCAAT GCATCTCTT CTGCCTCCTC
ATAGAGCAAG CTCGTCTCA GGAGGAGTC TGCGATTTC TCCATGCCA CCCTTCCAA ACATCTTGC TAGAGTCTAC
ATCAAGAGG GGGAGCGCT GGAGGTCCG ATGAAACGTC TGAAGCCAA GTATGCCCG CTCCACCTGG TCCCTCTGAT
CGAGCGCTG GGGACCCCTA GCAATCGCC ATTGCTCGG AGGGTGACCT CCGACCAAG GAGCGCTGT CTGTGGCTGT
CCATGTTGA GGTATCTG ACCCGATTG GAGCTACCT CAGGACCAT CTGGCGGGC CACGCCACC AATCGTATG
ACGTGATGA GTTTTGAGT TCACTGCTGT GAGCGCATGA GTGTGTACT GAATCTGTG GACAACGGT AAGTTACA

SEQ ID NO:63: (Length of Sequence = 183 Nucleotides)

CCTGGAAGT GGGGGTGGC CAGGGGCCA GGCCAGCAT GCACCCCAT TTTTGGGG GCTGATCCCT GCCCAGCTC
TGCTGATACC CGGGCCACA GGTGAGGC GTTGGGGTG GAGTAGAGG TGGGAGACA GGGGAGAG CCTKAGGAGC
CACAATTGGG CAGACAGAAG CG

SEQ ID NO:64: (Length of Sequence = 316 Nucleotides)

GGATATTGCA CCTTACAGC TTAGGAGCC TTTACCAGAG ACGCTTAAA CGCCCCAGT TCAGCCATTG TGCTGAATAG
AGTGAATAT AGAACCAGG ACAGAGTAT TCATTTAACG TTGATATATA CTGTCTAAG AAACACTAAC AATACTGTAA
CTTTGTTAA GGACATAGTA TTGAAATGG AATAGAGGT CAGGCTACA TCATCTTAGT TTAATGCTGG GCACTTTTT
CTGATTTCTG TAGTCCCTG GAAATGTGT CCTTGTACC CATAAGTGG TACAAATGA TTTGTAACTA TTTTGG

SEQ ID NO:66: (Length of Sequence = 411 Nucleotides)

ATCTGGTCTA GAGAGGCGAC TCCAAGCTCT CTGTCTGGCT CCCAGCTGTG GGAATCCCTT AGGCTGTTC TCAACCTACA
CGTTAAAAAT GCTTCTGGT GTGTTTGGG AGGGGAGAG GGAACTGAG CTCTCTCTG ACCTCCTCA ACACCTTGA
CTTGTCTACC CAGCCATTTT CAGTAGCTAC ACGGTGCTC ACAGAACTT GGGGGGACT CGGCACACAA CACAGAACC
GGGAGTCCA TGCAGGTGCG GGAACACATG TCGACCCAG GGAGCAAGGA ACACGCCACC CCGAGGAACA TGCAACCGA
GGAAGGATC CCTTCAGAT CCAAGGATG CACAACCCG ACGGGCGCT TAGGGAGCA CGATTTATCT AAGGAAAAAG
GCCACTGTTT G

SEQ ID NO:67: (Length of Sequence = 413 Nucleotides)

CIGCTCCTTA TGTMTTAT TCCAAAGTT AGAATTTCT TGCTTCATAG TATTATTTA TTTTACTAAA TTACAGAGTA
AGAAAAGCTT TTCATTTAT CTGATTTAT TCTTAGAACA AAAATATTAC GATCTTCTAT ATTTTGTTC TTTTGCCAAA

SEQ ID NO:54: (Length of Sequence = 310 Nucleotides)

AAGCCACCGC ACCTGGCCCA TTACATTAT AATGTTATAA GGGGGTGTAG GGGTCGTCCA CTGGAGCAGT GGTTCCTCAA
 CTCGTGTATG CATAGGAATT ACCTGAAGGG CTGTGTAAAA CACAACTGC AGGGCCACC CCCAGAGTTT CTGGTTGGGG
 AGGTGTGGGC TGGGCTTGAG GATGTGAATC TCTACAAGC TCCAGGTGA GGCTGCTGGT CTGTGGACCC ACTTCAAAGA
 CCCAGTGAAT CAGAAGAGTC AGTGAGACTG GACAAATGAA CGCAAGACAG TCTTCAAAGG AGACCAGAGG

SEQ ID NO:55: (Length of Sequence = 252 Nucleotides)

TTTTTTTTT TYCCGGGGAR GTCAAACATA CTTTTTCAAC ATAGGATKTC TGACAGGAGG CCTTGGMCA GGGTTCCTTG
 ACCTCTGYTT CAAACCCAC TGGAAACAGA GCAAAGTCAT CAMGAAAACC CAGGACACCA GGGCAGGGGG GCTGCACAAG
 GTGGGTAGG TCACAGTGGG CCAGCACACA GTGGCCCCGC CCAGGTCCAG CCCAGCCTGG GGGAGGGTGT GAGGGTTCCA
 KGCAAGCTCA TT

SEQ ID NO:56: (Length of Sequence = 188 Nucleotides)

GTCAAGTCTA CCATCATCTT AGAAGGAAAA GGCATGGTGG GAATTCAGCA CCTGAAGTGG TATTTACACC AGCCTCGGCA
 TCTGGCAAG RAATAGCGAT TGTTTATAGT GATGCAGAGA GAGAACAGGA GGAKGAAGAA CAAATACACA CAAACAATG
 ATCTAGGGAG ACTCCAARGA TCCAACAG

SEQ ID NO:57: (Length of Sequence = 304 Nucleotides)

AATCAGCCTG CAAGCAAAG ATAGGAATAT TCACCTACAG TGGGCACCTC CTTGAAGAAG CTGATAGCTT TTACACAGTA
 TTAGATTGAA ATAATGGACA GAAACACATT CTGTCAAGA AAGGGGAGA GAAGTCTGTT TGCAAGTTTC AAAGCAAAAA
 GCAAAGTGA AATGATTGA GGAATTTCTG TCTAATTGGA GATGATTCTC TGGTGTGTAG AAATGGCAA TATTGATGAT
 TGTGTGCTAT TGATTGGTGC AGGATACTTG GTATACGAGT AAATACTTGA GACTGTGTCT ACTT

SEQ ID NO:58: (Length of Sequence = 261 Nucleotides)

CCAGAAGCTT CTGCTCTCT CTGTGCTCTC AGTGGTTCCC TTCCCTGAAG TGCTCCCTT CTCAITTAATT ATAGCCTGTG
 TCTGAACATT GTGAGCTATA AGAACCCTCA TATTAATGGT TAAGGGACTG TTGGAAATGA TGTGATTTTA TTAATAATGG
 GGTCTTTGTG GAGGAGTCAG GAATGGTCAA AATGAGCTTC AGGTATGGGG CTGTCTCTRT GCTCCTGATA CCAAGGGTCT
 GGCAAGCACA AAGGAAGGTG G

SEQ ID NO:59: (Length of Sequence = 470 Nucleotides)

AATACGTATT CTGAAGCCAC TATATCTGCA TATGTATCCC AGATTGAAC AATTAAGTAA AAAGATGGTG AATGATGAAA
 GCCAGTTTTC TGTCTGTAGA AGTGAGAGGT GACAGATAAC CAAAGGAAGA AGGCTAGAAT GGATAGAGGA CAGTGCTTAA
 GTGTAGTTCC TGTGCTTTT AGTCTTATAG ACTTCATTTC CAAAGTTTCT TAGCACCCC CTTCCTCTT TGGTGAGGTT
 GTTTCACATA TTTTCTAGAC AATTAGATTC TTTGTCAAA GTCGTGTTTC CATCCGAGA GCCTCTGATC TCTTAAATGA
 TTTTAAAT TTACATACAT TAAGGTTTAC TCTGCTGTAA AGGTCTGTGG GTTTTAAATCC TGTCTCACAG TTTTGCATA
 TGTGGCCTT CTGCTGGGA ATACTCTCCC AGATATTCCC CATGACTGGC CCTTATCTT CAATCAGATC

SEQ ID NO:60: (Length of Sequence = 466 Nucleotides)

GTGTTTCAAG GGAAGGCAAC TMCAAGTTTG TGCAAGTGAA TTTCTGTAAA GTTAAGACAG ACTCAMCTTC TCATTCAATC
 TGGGGCAGTG GATAACCTT CTGAATAGAC CCACTTGTTC ACGGACAGGG ATAGAGGTTT GCCTTCTTC TTTCTTGAA
 TTTGGAGTGA GCACTAGGGA GGGGAAGTGC ATGGGTGACA TGAAGAAGGT GAAGATGTAG TAAAAGCATC ATCCAGGTAC
 ACATTAAACG TGCTGCAGAA TTTTCACAAT ACAACTGAGG GAGTCTGTAG TGGCAAAAGC AATTACTGAG CACAAAAGCC

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GATCTCTTCC AGCGTCAATG TACTGGGACA GCAAACACTC ACATTGAAG TTCTTCTGG CCACCGGCTT CCCAGTACAT
TGACGCTGGA AGAGATCATC TCAAATGGTT CTCCAGTGTG AGGCTGGAGA TCTCCAGAAA TGGAGTCTAC TCCTGGGGTG
GCTGTATGG GAGCC

SEQ ID NO:48: (Length of Sequence = 270 Nucleotides)

GTCGTGAGA GGNACGGGC AGCTCAMRCC CACAGGGCT CCTCATCTC TGTGGTGGCA TCCTCATTC ACTCTCATCT
GCCACCTKCT CAGGCGGGCC TCTAGCTTTC TCATGTACTC TAGCAATTCC TGTTCCTCT GCTGTAACTG CTCCTTTTCC
TTCTGGAGCA CACGCGGGC TGACCGCAGC TGTGTGAGCT TCCGCTTACT TIMTGACAAC TGTACCAGGC TAGAATCCTT
TCTGCCTGGG TCAGCTTCAG TCTTTGAACA

SEQ ID NO:49: (Length of Sequence = 359 Nucleotides)

CCCTGAAGAG TGGGTGGGAC AACCGATGG GTGTAACCCC TTGTGGGGGA AAAGGAGTGA GTTTACTTGG TAAAATAATA
ATGTAATGT CAGCAGCGTG GCTGGGGGAC TCAGTATGGT CCGGGGAAA GAGTGGGGC AGTGAACCTC CCAGGCGGAC
TGGCCTTGGG CTGGCAGCAG GGAGGCTGCA GGGCGCTAC CTMCTCTGCC ACGTCCCTGC CTAGGAAACC TATCCCAGGA
CACCCCTGCTT TGGCCTGGAT AGCAGCCTAG GGATGAGCAT TTCTTTGAAA GCAATTAGGT TATTCACCTG GTATTAAAC
TATTTACTGT TAAAAATCT GTGACTTCAT GGAGTGGG

SEQ ID NO:50: (Length of Sequence = 271 Nucleotides)

CCAGGAAGGA CAGGAAGTGT CCTCTAATAC GCATAAGATC CAGTACAGGA GAGATGGGAA GAGAGKCTCC AGGATGAAGG
GGAAARAGG CCGCATGCCA GTCACCTGGC ATCTNCCAGA GAGGGYCAFY CTNCCACTG AGACTGGGGC ACGAGTCCCG
TCATCACCAT GCCCTCTGAC TGTCGAACTG TCTTTTACC TGACAAATAC TACACAGGTA TCGMTGCTGG CCATCTCTG
CTATCTAAC CCAGGAAGT ATTAGATTGT T

SEQ ID NO:51: (Length of Sequence = 226 Nucleotides)

CTCCAAGCAG TAAAGACTTG CAAAGCATTG CATTTTGATT AAACCTTGCT GGGCTGAAGG GCAGGCAGAG CTGTGGTGGGA
CACTGGCAGG ACGCAGCACC CCCGACTGG CCCTTGGCAG GCTGCACCGG GCGCATCGG GTGTGGGCCA GGGTTCCTT
AGGAAGCAGG TGGGAGTCTK NCACGTGCAG KCGGTCCAGG AGKGYACCAK GCCTGGCAGG GCACTG

SEQ ID NO:52: (Length of Sequence = 408 Nucleotides)

GGTGGGGCAA GGTGGGGGTG AAGTGCACTC CTGCTGCATG AGTGGCAGGG CAGGGTGCAC ACACACAGT GGGTCTGGC
TGGGTGAGGC AAGCAAAACC TGCTGCACA TGGCAAAGGG ATGTGGGAAG TATCCATGGG CNCCAGGGGA AGCTGCAGTT
TGGGGAGGGA ATGGGTGGCA CTGCTGCGTG TCTGTGGGG CCACCCACT GGGGTCTCC AAGTGGTCAA GTTCGCTCTG
CCAGGTTAGA AGCTATGATG GGGGCTCTA GGACACTNGA GGTGACCTG AAAGCAAGGT ACTTTTACA CTGGGACCT
GCAAGAGGCC AACAAGATTA AGGGATGCTT CAGGTGAGC TTGGCCCTCT TCTTATGGG CAAGACCTTC CCGCAGAGT
TCAGATCT

SEQ ID NO:53: (Length of Sequence = 314 Nucleotides)

TTCTGTGAG GAGGACCACA TGGCAGTCCA GCAGACTGCA CATTTTAAA AACTAGGTCT TCCAGGTAG TTTGAGGAGC
ACCAGGGCAC ACTCAGGGA GGGACATGTC AGTGTCTGAG AGCTCACGGG AGGAAGTGT AGTGACAACA TGGACCATGG
TGGAGTACT TTAGACGGCT CTGGGTNAG GAGAATCATC ATGTAAACA GCATTAAATC ATTTGGAGAA ATTCAGAAA
NTCGTAGATG TACATTCTAG CCCACTTACC AGGCCTACTA AACGTCAATC AGATATATTT CAATTTGAAT TCGG

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SEQ ID NO:39: (Length of Sequence = 303 Nucleotides)

GCCAAAAACA NYTCTGAACC CGTTTTGGGA AATAATGGGA TTCCTTGATC ACGGGACAAC GAATCACCCCT GAAGTTTTTC
 TCCAGTTTAC TCAGTCACAT AAGCCACCAG AGGCTAACCA CACTGACAAC AAAAGCAAGT CCCAGGATTC CGGGGGCTAA
 TACCATGCTA GGCATTACTT GGGAAATTAT GAGTTGGTAT ACATCTGTGA ATTTGGTGGG AGGAGAAAAC TAACAGTAAA
 TTATCAAAG CCAGTGGTAC GTTCAGCGTT ATAAAAATTA CAAGGATCTG CTTCTCGGCG ACT

SEQ ID NO:40: (Length of Sequence = 178 Nucleotides)

GGTGTCGGGG GCTAGAGATA CACATGCCAG TNCATACAT TTCTCAGCAC TGTGCTGTG ATTCACAGCA GTTCAATTGT
 TCATGCGATA TAAGCCAGTC ATGTGGCCCA AGTTATTCTG TCGGCTGTGT TCTCTGCAGG AATCTGATGC AAGAAGGCCT
 GAAGGATGCA TGGCTTTT

SEQ ID NO:41: (Length of Sequence = 322 Nucleotides)

TGCCTTTCIT TAGAAATTIA GGGCAGTGTG ATGCTTCCAG AGGTCTGTAC AAACACCAGC TTTCATTGTG CTGGGGAGTT
 TCCATGCCTC TYCCTTCTCT TCGCTTAGTG CAGGTTTCTG CTTTTTATCA GTTTGACTGC CTGAGACTGA KTCCAACAAC
 CCAAAGTGAA CGCTCAGCTC CTCTTTTCA AAGGAGGATG ACTTNTCTNA ACAACTATTT AGGTGAATTA TTKCKACAGT
 TTATTAAAGC AATGGCTCTA AACAAATTCC ACTGGGGGTG ACAAAGTACA ATACAAAAGG CGTACTCTGA GGGCTTGGGG
 GT

SEQ ID NO:42: (Length of Sequence = 278 Nucleotides)

AAACTTTGGC ATTTTTATTG AGACACGTAT AAAACAAAA CAAAAACTT CAGTGATACA ACAGACGTTT TCCCTTAGTT
 CCCCATCCAA GGGGACAGAG GTGTGCAGCT GAAGCTGGAY CTTTTTCTG TCCTACCTGG AAGCTGTCTC ACTGCTGGAT
 GAGAAATGGCT TCTAAAAGTG GATCTTGGGG ATCCTTGTA ATTTGCCCTC GGATAAGGAG TGAAGWTCAT TTACGGCACA
 TGTGGATTAT GGTTCACACA AAGATGTCCA GTTATTTT

SEQ ID NO:43: (Length of Sequence = 225 Nucleotides)

AGATCAAAAG ATGAGAGAAG CTGAAACAGA ACCGCATGAG GGAAAGAGGA AAGTGAATC TCTGTGGCCC ATCTTCAGGA
 TCCACCACCA GAAAACCGT TACATCTTCG CCTCTTTTAC AAGCGGAAAG CCAGCAGCAG GATCTCTAGG AATATTAGTA
 TTAAGAAGG CTATGCAGCA TAAACCTGAT TTCAAAATGG TAAAGCAAG GTTATGTGTA CTGT

SEQ ID NO:45: (Length of Sequence = 305 Nucleotides)

GGATTGCCAG GAGCTGTTCC AGGTTGGGGA GAGGCAGAGT GGACTATTTG AAATCCAGCC TCAGGGGTCT CGGCCATTTT
 TGGTGAAGTG CAAGATGACC TCAGATGGAG GCTGGACAGT AATTCAGAGG CGCCACGATG GCTCAGTGA CTTCAACCGG
 CCTKGGTAG CCTACAAGGC GGTGGTTTTG GGGGATCCCC ACGGCGAGTT CTGGCTTGGG TCTTGAGAA AGGKGCTAG
 CATCACGGGG GGACCGGAAC AGCCGMCTGG CCGTGCAAMC TGCGGGGACT GGGATGGGCA AACGC

SEQ ID NO:46: (Length of Sequence = 264 Nucleotides)

ATGAAATAGC ATATCINNGC CTAATTAAAA GATTCCATTA CATTACTTTT TATCATTTAT ACTGCCAAGG ATCAGTCACA
 AAAAATTCAA ATTATACATA TTATTCATGC TTTAATTICA TAAATAAGTA AATTAAAGCA AGCCAATATG TCTCTCTCA
 TAACATAGGG AAAAATTACT GTTTAGCATA ACAGNGTAAT AGGCAAAGTC TAGCCATACA GCAGCAGTTC ACGGTGTTGT
 CAAGTTGGKA CAGGTTCCAT CGAT

SEQ ID NO:47: (Length of Sequence = 175 Nucleotides)

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ACAGGATGGT CAGGACAAGC CACCTCTGGT AAAGTGACAT TTGAGANGAC COCTGAAGGN GGGGGGTTGA GTCATGTGGA
CATCTTGAGG AAGAGTTTAC TGGCACAGGG AACTGCAAGG KCAAAGTCCC CAAGTACTAG GGCTGGGGGC AGT

SEQ ID NO:33: (Length of Sequence = 257 Nucleotides)

TCAGTCAGCT TATCGCAGGT GCAGCCAAAC ACAAGCTTC AGGACAAATT GTACAAACTT TACAAITGTTG GATTTAAATT
TAAAATATGA TACATAAAAA TCTACACAAA ACTGATAAAA ATCAAGCACA GNTACCAGGA TTGAAACTTA TAATAATCCA
TGTGTGAAAG GGAGTCTTGT TTCCTTTCAA GTGCTTTTAT TCTGCTATGG AACAGTCAAA ATGGAAGNTG TAAAGCTTTG
TGGTTAGTTT AAATTAT

SEQ ID NO:34: (Length of Sequence = 307 Nucleotides)

CTCCCAACCA TATCTAATCC AACAGTCCA GCTGCCTCTC TCINAAMAAT ACCNARGATC AGGCCCCCTTC TCAGCACCCC
CACAGCTGCT GCCCCAAAGG AAGCCAGTC ATCTCTCAG GAGATTGTTC AGCAGCCACT GCCTCCTTGT CACCTTCGCC
TGTGGTCATT CTCCCCACAT GGCCAGGGAA TGGTCTCTGT TAAAGTCTGC TAGGTACGG TCCTTCCTAC TCAAAATGCT
CCCTTGGCTC CCACTGCCCC CAGAGTAAAA AGCCAGACC TTCAAATGAC ACAAGGCCT ACAACGA

SEQ ID NO:35: (Length of Sequence = 266 Nucleotides)

TCCACAGGTC ATCAGATGCC TGCTNGATAA TATATAAACA GTAAAAACAA CTTTCACTTC TTCCTATINT AATCGTGTGC
CATGGATCTG ATCTGTACCA TGACCTTACA TAAGGCTGGA TGGACCTCAG GCTGAGGGCC CAATGTATGT KGGCTGTGG
GTGTGGTTGG GAGTGTGTCT GCKGAGTAAG AACACGNTTT TCAAGATTCT AAAGCTCAAT TMAAGTGGCA CATTATRAT
AAACTCAGAT CTGNTCAAAA GTCCGG

SEQ ID NO:36: (Length of Sequence = 388 Nucleotides)

CAGCTTTTGA AAGACTTTGA CCTCTGAACA AAAAGCCAGA AGGCTGCTTA AAGAAATAGT AAGGGTTTCA CTTGCCCTGG
ATAGTCACAA ATCTAGGAGT ACTGGTTCAC TGCCTTGGGT TACCAGGTAT CAGCTCTTTC ACAATCTCTC CTCTTCCCAT
GCTTCCCCCT AAAGTCCAGT TGACAAATGA AAAAGAAAAA AAGGCCTTGA TTTATAGTAT TGCCAAACAA CCTCATAAGA
ATGGGTAAAA TTACATACAC ACATACATAG AGAAGGGAGG TAATGCTGTG AATCTACTTG AGCTGGATTG CATGCTCCCT
AGGGACCAAG GTGCCCAACC TGTAAITTTA TTTCTAACTT TTATAAATAT ACTCCTTTTT CACGGATG

SEQ ID NO:37: (Length of Sequence = 342 Nucleotides)

GAATGTCTAC ACAAGGAAGT ACAGGATTIG GCTTTTCTAG ATGTCATATC CAACTTTCG AGTCATGAGA ACAAAGTGT
TGCCAGCAG GCCTCTCTCA CAGAGCAGAG ACTTACTGTG GAAAGCTGAG AACTGCCCGA TACAOGGCAT CATCCCATCT
CTAATTTCCC CTCTGTCTC CATCCAGCG CTCTTCCGC TTCTTCTCT ACCATACCAC TTGTGCATGC ATGTRATGTT
CTAATACCAA TTGAAGAACC GCTGTAGGTA CCTCCCTAAT AAGGATTTCT AAACCTATAG TTAGTGTGAT CATGACTTTG
GTCAAAGGCA AGTGTCCAC CC

SEQ ID NO:38: (Length of Sequence = 355 Nucleotides)

GATGACTTGG AGAATGCCGA AGAGGAAGGC CAGGAGAATG TCGAGATCCT CCCCTCTGGG GAGCGACCGC AGCCAACCAG
AAGCGAATCA CCACACCATA CATGACCAAG TACGAGCGAG CCCGCTGCT GGGCACCCGA GCGCTCCAGA TTGCGATGTG
TGCCCTGTG ATGGTGGAGC TGGAGGGGGA GACAGATCCT CTGCTCATTG CCATGAAGGA ACTCAAGGCC CGAAAGATCC
CCATCATCAT TCGCCGTTAC CTGCCAGATG GGAGCTATGA AGACTGGGGG GGTGACGAG CTCATCATCA CCGACTTGAG
CTGGAGTCAT CTTTCTGMC CTTTGCCCCA TGCCC

116

GATTGGTATA CGGGCAACAA TGGATTGATA GCCTTAATAT AGAAATAGTT CCAGCAGGCC AGATGCAGTG GCTCAATTCT
 GTAAACCCAG TGCTCTGCAC AGCTAGGAAG GAAGATCACT TGGGCCCAGG AGTTCAAGGC TCCAGTGAGC CATGATCAGG
 CCACTKCCCTC CAGCCTGGGT GACAGAGTNA GGCCCTGTCT CTAAAAATG AAATAGCTCC ATCAAGTCAA TAATTAAAG
 TTCAACAGCC CAACAGANCA AAAATTGTAA ATGANCACAA ATTAGAAAAT GTACAAATTA AATATTAAATG ACCCATAACC
 CTATAAGGGA AAGTTTAACC TCTCTAGTAT TTTT

SEQ ID NO:27: (Length of Sequence = 322 Nucleotides)

AAAACGTGAT CACCACAGCT CCGTTCCTGC AGTGACACTT AACATACTCA GCATCTTCAT GAATTCTGAA TAATTTACTG
 ATCGTAAAGT CTAAAAGTAT CAATTTCAAG TGAGCAGTTT TAAATCAGAA AATAGTCAAT AGTTAATCAT GACTCTTCAG
 GGTATTTCTT TCACGTCTC TGAAGAGTTT CCCAGAACAT TCTGTGAAA AGGAATGCCT CCCAACAAATG GAGGAGCAAC
 AATAGCAACA GGCATCTGAA TCAGCCTGGG CTCTGAAAAC AGACCAAGA GNGTTTTTC TGCTTTCTTC CAGTGAGGAA
 GG

SEQ ID NO:28: (Length of Sequence = 287 Nucleotides)

TATTTTTATT AAAGGACCAC CTTGGCTGTM GTGAGATGAA TGGATTCAA CAGGGCAAGA GTGGATACAG MGAGATAAGT
 TAGGAAGCTG GTATAGAAAT CTGGATGAGA TATGGTGGCT TGGATGATAC TAGCAGTGAG TATGGGAAGT AGGTGGATTA
 CTTTACACTT TTTTAGATCA GTCKATTCTT GATGCTTGA AGACAAATTA ATCTCATATA TAACTCTAAA CAACATATTT
 ATATTTTCATG TAAATAAGGA TAATGCTGAC CAAATATTAG CACCTTT

SEQ ID NO:29: (Length of Sequence = 282 Nucleotides)

CAGGGCAGGG AAGCCTGGAA GCAAAGGAGG ACCTGGCTCC TGACTCTCAG AGAGGATAGG CTGGGATCCC TGGGGCAGGC
 CTGTCTCTTG GCTGGCCAAT TTAGTCTTTC AATTGTCTAA GGGCTCTCCA TTGCCTGCCC TTGCCTCTTT CTAGCCTGTT
 ATTTCTAGGC TCCTCTGAAT AAATCTCAGG TTTCTACTG TCATGCCTTT AGTTCAAAA TGAGAATCTG CCTTACAGTG
 CTGGCCTCCT TCCGGCCTGA AAGCCAGCAC CTTKCGACCC GG

SEQ ID NO:30: (Length of Sequence = 345 Nucleotides)

GAAGCTGGTG AATACATTTC AAGACACAAC ATGGCACCTG TGCTAGCTC TATGGTACAA CATGGTACTA TGACACATAT
 AATGGGTTC CAGATGGGGA AGGCAGCTTC TCTGCACTG AGCTGAGATC TCAAAATAGA CAATGTCAAG ATGGAATGAG
 AAGGGAAAAA CAGCATGTGT AGACAGGTAG TGACAAAAGG CTAATTAAGG ACTGAAAGAA ACCAGTGGCC AACAGGGGAA
 TCTACGGGTG ATAAAGATAA GACGGTGAGA GAGATAAGGC TAGATTGTAT AAGGCTTGAC AGACCATAGC AAGATAAGCA
 AGGACCTGTG TCTGTTAAC CATTT

SEQ ID NO:31: (Length of Sequence = 343 Nucleotides)

ATAAAATTGG TCTGGGTACC CTAAGGTGTT TGCKTTGATA GAAAATTGAC ACCCCAACT AAGTGTCTA CTTAGCTTCT
 ACAATAGTTA TTCTAGACC TTAGATTAGT CATTACATTT TTATTAAAG TACTATGTTA CTTTCATGAC TACAAAATGA
 GGCACCTGTA CAAAACAGGA ATGAAAACAT ACATATACTG TCTGTCTTT ATGTCGTATT AATGCCAAG ATATTGTCAG
 GGATTATTTT AAAGAAGCCC TTAATCATGA TGGCTATTTT TAAAAATGGC ACAGGACAGT AACAGGCTGA AAAGAAACAC
 CTGTTTGTAG GGGCCAAATT AAG

SEQ ID NO:32: (Length of Sequence = 153 Nucleotides)

SEQ ID NO:20: (Length of Sequence = 437 Nucleotides)

AGAACAAGGG AACTCAGCAG CCCCTCCCTT CCCATCAGCT GTTCCTGAGA GATGCAATAT AGTAGTCATC GACATCATCC
 TTATCAACAG CATCATCACT CAGACAGTGG TGAAAGTCTT TCTTCACAAG GAAAAACAAA GATAAAGAAA TACATGAGCA
 TTAATCAGAA ATTTTCAAAG CTGGGATTCT AATGATATGC ATTATCATTG GACATTCAAA TGCTATACAT CTTCTGATGA
 AGCCTCCTTG ACAGCAGCTA CACTTATTTT ACATTAGAAT GCCTAGAGAA ATCCTGACTG CCCAGCTTGG TCATGGGACC
 TCCCCACTC TCCTCTTGA GGAATGAAAA GATGTGGGG CTTTCTACTT TTGCTACTGA GCTGGGGTAT ATGCTAGGT
 CCACTTTCTA AGGGGCTTGG AAGGGTTATT CCATCTG

SEQ ID NO:21: (Length of Sequence = 385 Nucleotides)

GTTTGATTG CTTTTTTTTT AGAGTTTTAC ATCAGTGTTT TTCAGGAATA TTGGTCTTTC ATTTTCTTTT CTGGGAATAT
 TTTCTAGTTT TACTTTGTCA GAGTAAATTC TGGCTTCACA GAATTATTTG TAGTCTCTCC TGTCTTGGTT TATTATGCT
 GCTATAACAA AATACCACAG ACAAGGTGGT AATAAATAAC ACAAATTTAT TTTTCCAGT TCTGGAGGCT AGGAGTTCAA
 GAAGCTGGCA AGTTCAATGT CTGGTGAGAC CCATTCTTTC ATAGGTGGCA CCATCTAGGG GTCCTTACAT GRCAAAGAGA
 TGAAGGGGCC AAAAAGATGG TGACCTATTG TGAGGCCCTT TTTAAAGGGC CTTVAATCC CAGTC

SEQ ID NO:22: (Length of Sequence = 374 Nucleotides)

ACCTTCATGG TCATGAAGGC CATGCAGTCT CTCAAGTCCC GAGGCTAAGT GAAGGAACAG TTTCGCTGGA GACATTTCTA
 CTGGTACCTT ACCAATGAGG GTATCCAGTA TCTCGTGAT TACCTTCATC TGCCCCCGGA GATTGTGCTT GCCACCTAC
 GCGTAGCCG TCCAGAGACT GGCAGGCCTC GGCCTAAAG TCTGGGAGGG TGAGCGACCT GCGAGACTCA CAAGAGGGGA
 AGCTGACAAAG AGATACCTAC AAGACGGGAG TRCCTGTGCC ACCTGGTGCC GACAAGAAAG CCGAGGCTTG GGTCTGGGTC
 AGCAACCGAA TTCCAGTTTA GAGGCGGATT TVGGTGITKG ACGTGTGAG CCAC

SEQ ID NO:23: (Length of Sequence = 322 Nucleotides)

CAAAACGTGA TCACCACAGC TCGTTCCTG CAGTGACACT TAACATACTC AGCATCTTCA TGAATTCGA ATAATTTACT
 GATCGTAAAG TCTAAAAGTA TCAATTTTCA GTGAGCAGTT TTAAATCAGA AAATAGTCAA TAGTTAATCA TGACTCTTCA
 GGGTATTTCC TTCAGTCTT CTGAAGAGTT TCCAGAACAA TTCTGTGAA AAGGAATGCC TCCCAACAAT GGAGAGCAAC
 AATAGCAACA GGCATCTGAA TCAGCCTGGC CTCTGAAAAC AGACCANAGA GGAGTTTATC TGTTTTCTCC AGTGGAGGAA
 GG

SEQ ID NO:24: (Length of Sequence = 113 Nucleotides)

CCTGAAATCG GAGTCTTTTG GACTGACTCC AAATTCAATG GGTGGCACAG GCAGCACGGA GTCCACGTGA ATCTCCACCC
 CGTTAACAGG CGGGACGACA GCCCCTTGCA GCC

SEQ ID NO:25: (Length of Sequence = 399 Nucleotides)

GGAAAGAATG AAGGAAAAAC AAGACAAAT CTACTTCATG GCTGGGTCCA GCAGAAAAGA GCAGACGCTG GCCTCAGACA
 CAGACAGCAG TCTTGATGCC TCGACGGGAC CCCTTGAAGG CTGTGATGA TAGGTTAGAA ATAGCAAACC TGTGAGCATT
 GAAGGAACTC TCACCTCGT GGGCCTGAAA TGCTTGGGAG TTGATGGAAC CAAATAGAAA AACTCCATGT TCTGCATGTA
 AGAAACACAA TGCCTTGCCC TACTCAGACC TGATAGGATT GCCTGCTTAG ATGATAAAAT GAGGCAGAAAT ATGTCTTGAA
 GAAAAAANTT GCAAGCCACA CTTCTNGAGA TTTTGTTCAA GATCCATTTC AGGGTGAGCA GTTAGAGTAG GTTGAATTT

SEQ ID NO:26: (Length of Sequence = 355 Nucleotides)

114

GGGVGCAAAG TAGCAGATTC TAGTAAAGGA CCAGATGAGG CAAAAATTAA GGCACCTCTG GAAAGAACAG GCTACACACT
 TGATGTGACC ACTGGACAGA GGAAGTATGG AGGACCACCT CCAGATTCCG TTTATYCAGG TCAGCAGCCT TCTGTTGGCA
 CTGAGATATT TGTGGGAAAG ATCCCAAGAG ATCTATTTTG AGGATGAACT TGTTCATT TA TTTGAGAAAG CTTGGACCTA
 TATGGGATCC TTCGCTAAT GATGGATCCA CTCCTGGTC TCAATAGAGG TTAATGCGTT TGTCACTTTT TTGTACAAAA
 GGAGCARGCT CAAGGAGGGC TG

SEQ ID NO:15: (Length of Sequence = 354 Nucleotides)

ATGTTGATGC TGAAATTVAAGATCCACCAA TTCCAGAAAA ACCATGGAAG GTTCATGTGA AATGGATTTT GGACACTGAT
 ATTTTCAATG AATGGATGAA TGAGGAGGAT TATRAGGTGG ATGAAAATAG GAAGCCTGTR AGTTTYCGTC AGCGGATTTT
 AACCAAGAAT GAAGAGCCAG TCAGAAGTCC AGAAAGAAGA GATAGAAAAG CATCASCATA TGCTCGAAAG AGGAAACATT
 CGCCTTCGCC TCCCCCTCCG ACACCAACAG AWTCAAGGGA AGAAGAGTGG GAAGAAAGGC CAAGCTAGCC TTTTATGGGG
 AAGCCGCAAG AAGTCCAGAA AGAGGGWGG TTGA

SEQ ID NO:16: (Length of Sequence = 348 Nucleotides)

CAGGCAAGTT TCTTCCAGGA TGAGAAATCA GTGGAAAGTG AGGGCCAGCC AACAGCCACC ACCAACCACC CAACACGCGA
 GCGAGACCAT CTTAAAAGAG CCCAGCCAA GCTGACCATG GGTCTGACCC CAACTGAAG AATGCCCCAG CCCAGCCAAA
 CCCAAATTGC TAACTTGTAT TATAAGCAAG TACAATGGTC CTTACCTTAA GCCACTAAGT TTTGGGATGC TTTGTTACAC
 AGCTATAGAT AAGCTGATAC AGGGAATGTC AGAWTCCATG ATGAGAGACC GAGCCTTTCA KTCTGTGAGA GGYACCTTGG
 GTTGGCAAAA CTTCAAAAAG AGGGACCT

SEQ ID NO:17: (Length of Sequence = 415 Nucleotides)

AGCAYGGGCT GGGGGGCGCG GAGTTAGGCG TGGGGCTTGT TTTACGCTCT GCCCCCACA CCCCCTCCTC TTCCGTCTCG
 ATTAAGCCCA AGGGTTGGTG GACTTAACTT TCAGCCCATC TCTAAGGGTT TCACAGACTG GATCTTTCTA AACTTTATIG
 GGTACCTGCT TCCCCTTTTC CCTGGTAGTT TTCTATCTACA AAAAGTCAAA ACCTGATCGA AATAGAAATA AGATCATCAA
 ATTGGACCAT TCTCTTAGCG TCGAGTGTG CCGGCCAGAC TGGCATTCAG TACACGCTGA GATCCAAACA CATCAGACTG
 GCCTCAGGTC ACCAATCGC CACTCAGGGC ACAAGGCCTG CCCTTGTGGT CACAAGGCTT TCCTTAATGT CGTCGGTGCC
 CAGGTGAACC ACAAG

SEQ ID NO:18: (Length of Sequence = 356 Nucleotides)

GTATGTATGT CTGTAGGTAT TTCTATACTT AACCATCTGT GTCCCAATTA AGCTAAACAT GATTCATTCT GATGCCAACC
 CCCATCCATC ATGCCATGGA TCGCTCTAGA CTTCTTCCCT TGTAACCTCC CACTCAAACA GTGAGAAACC TTGCCCCAGT
 ATGTTTGGGA GTAACCTCAC TGGGAGTTTG CAGTCCCACT AGATGAATGC CAACCCATT TTTCAATTAA AAGGACTTTT
 GGAACCATAG AGCAATGGCT GGGCTGGGTC TVGCACGTTT ATCTTGACTG AAACAATTGG CCATGAAGGC ACTTGCCAAG
 GAAACTCTAG GGGCCACAAG GGTCTGGGT GCTTGC

SEQ ID NO:19: (Length of Sequence = 339 Nucleotides)

CATGCTTCCA TTTTITTTAG TTTTAAACCA CCAAACCAAT ATTTTYCCTT TAAATTTTAA TCTTATAATA TAGAAATCTT
 ATGTAAATGA AATTTTGICA TGTTCAAAT AAAGAGAACT GAAGTAGAAA ATAGAAATGC CAGTAAACAA CATAATGTTT
 AATTTACAAC TTACATTAGG GGTITGGGGG VATGCTAATT ATATATTGAG AATATACATT AGAATCTTTC AAAATGGGCT
 CTCTAATGA GGTCACTACT GAACATAATT GTTCCCTCTT CTGTAAATA GAATAGGTTT AAATGACTAG TCCAAATGGA
 ATTATTGCCT TCTKGTAA

113

AACITGCAAC ATAAATACTA GAAAAAGAGA AAATATCATC AAAATACAAA TAACTGTTAG AAATCATTGC TCAAAAGAAR
 AACCTGGCAA TGCATGATTA CGAAATGCAA AAGAMGATAC AGTTGCTCTC TGTATATGCG CTTTCCACAT CCACAGATTG
 AAACAACGTG GGATAAAAAA GGATTTTTC A TGCCATTAA ACAVCAATGC AACAGTAA

SEQ ID NO:8: (Length of Sequence = 345 Nucleotides)

CTACAATAGA AGGCAACTA TGTCCTCTT TTGCTCAGAA ACTTTTAATA TCTKCCTATT TCCCCATGTA AAAGCCAATC
 CTCAACCACA GTGTAGAAGG GCTATCCATT TCTAGCTACA CATCTCCTCA GTCAGTCCCC CCAGCCCCAG TACTTGGGGA
 CTTTGCCCTT GCAGTTCCTT GTGCCAGCAA ACTCTTCTC CAGATGTCCA CATGACTCAC CCNCTCCTT CAGGGGTCTT
 CTCAAATGTC ACTTTACCAG AGGTGGCTTC CCTGACCATC CTGTATAAAT AGCATCACCC TACCTCCTAT CTCTCTCTCT
 AATGTCTCAG GAATTGATA TCAAG

SEQ ID NO:9: (Length of Sequence = 189 Nucleotides)

GIGAACAGAC TAAGGCCITT NTGGAGGCC AGAATAAGAT TACTGTGCCA TTTCTTGAGC AGTGTCCCAT CAGAGGTTTA
 TACAAAGAGA GAATGACTGA ACTATATGAT TATCCANGT ATAGTTGCCA CTTCAAGAAA GGAGAACGGT GTTTTATT
 TTACAATACA GGNITTINAGA ACCACCGGG

SEQ ID NO:10: (Length of Sequence = 267 Nucleotides)

CTCCCTTCGC CACCTGCTGG ACGCGAGGGG CTACTACGAT GCCATGGGTG TOCTGRITTT TTATTTCTCA GACAGGACTG
 CTCTGTATNT GTCTTTGGAT TCTACGTAGA TTTATATTG TAAATATTA CATTGTGTCAT GACCAGAAGA AATGTCATTA
 TCGTAAATTT TAGATTCTGG NGTCTATATA TGAAGNAAT ACTAACTACT AACTGTTATA ACAWCAAAT GTGGGNTGTA
 TATCTACARG CCNGAGCCGA CTGTCA

SEQ ID NO:11: (Length of Sequence = 247 Nucleotides)

CTCATAAAGC CAGGGTGATA AAATGTTAG TTTTCATGTTA TCTACAAGRC TAAGTCAAA ATTCCATGCA TGTGCTGRTA
 AAAGACCCAT NATGKKCTM ACTGTACTTA CCCCCATTT ATTAGCATTC ATTCTGTGCA CCAGCTCTAG TTCTCTGCT
 TAGCGAATCT CGCTGTCTT CAAGATGTCA TTCAAATGTC ACATTTTGTG GGAAGCCTG CCTTTTTTGA CAGGCTCTCC
 CTGCCAC

SEQ ID NO:12: (Length of Sequence = 280 Nucleotides)

AAGGCGAGAG GCTTCTGGAG AAACCCACCC CACCAACGTC TTGATCTTGG ACTTTTAVCC TCCAGAGCTA TGAGAAAACA
 AVTTCTGTIV VATVGVGCC ACTCAGCCTG TGGATACTGG CAGCOCTAGC AAACCTACAT ACACATACAT TTAAACTCG
 GTTAATCCT GTGRCCATTC ACTTATGGTT CAGTTTTTAA ATAGTCTTAG TCTTATGVCC ACTGTTAAAG TTCACCAGGA
 CATAGGSCAT TGGGAAAGG GGCTGTAACT TCTTGATTA

SEQ ID NO:13: (Length of Sequence = 339 Nucleotides)

VCTVTCTVCC AACTTCATTC AGATATTGAC TCTGGTGATG GGAACATTAA ATACATTCTC TCAGGGGAAG GAGCTGGAAC
 CATTTTTVTR ATTGATGACA AATCAGGGAA CATTCATGCC ACCAAGACGT TGGATCGAGA AGAGAGAGCC CAGTACAGT
 TGATGGCTCA GGCGGTGGAC AGGGACACCA ATCGGCCACT GGAGCCACCG TOGGAATTCA TTKTCAAGGK CCAGGACATT
 AATGACAGTC CTCGGAGGT TTCTGTCAG AGACCTATCA TGCCAACTGT GCCSTGTARA GGTCCAATKT TGGGTGSTGT
 ACGGTAGTGG GGAGGCCCTG

SEQ ID NO:14: (Length of Sequence = 342 Nucleotides)

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AGAGGCAGAG AAGAGCTTCA CAAGGTGTGT GCCAGCTCTG CATCATTTCC AGCTGCTCAA CCACCATTTC TCCCATTTTA
GGTCCCCAAA AGTAGGAGGT GGGGCTCAC AGAGCTGCTG TGGGCTTTGG GTATCAAAG CTGCAGCCAC CATATGGGGC
ACTCTGGCT GGTGTACAG GTGGGCATTG CCCAGGTCTT TT

SEQ ID NO:2: (Length of Sequence = 214 Nucleotides)

GTTTNCITTT TTCTTAGCT TCATTTCTCT TAAAAACAA GGAACAAGAA AACATTGCAC CAGCGTTCTA AGCCTCAAAC
AAAANACAAA ACAATCCCC CTGCGAAGAA CAATAAATT TACATCTCTT TGGCAACAAT AACTTAAAT CACCAACTT
CCATTCGCTC CAACCACAGC AGTTAGTTAG TTACAAAAT ATTCCNTGTG CTGC

SEQ ID NO:3: (Length of Sequence = 344 Nucleotides)

ATTAAATAGGA AAGATGATTG TATAGATGGT GGGCTATTAA CTCAGATCAG GATGAGAATC GGGAGTGCCT TTACATGTGT
GGTACCCAAA TGGGTGGTTG GATATAAGAG TAACAAAAGG ACTGAAAGGG TTAAAAAGA AAGAAAAAA AAAAATCCCC
TGGTTGGGAG GGTGTTAAGT ATOGAGTGT TTTCCAAACC ATTCCTCTC TGCTCACCTA CCCCTAGGTG ATTAAAGGAG
ATAACTTTTA AAAAAGAAAG AATTGGCTCA AAGTACTGT AAATTCTAGG ATTATATACC TTTATATAGG TTCATTCCCT
GATCCCTGTA TTATCAAGGC ACAG

SEQ ID NO:4: (Length of Sequence = 352 Nucleotides)

GACCCGGTAA CCGAGGCGGC AAGGAGGCCA GGTAGTCCCG GCACCTCTCA CTCTGCAGAG ACCAGCGCT TCGTGGGAGG
CCTGTGGGTC ACACGTAGGG GCTAGAGCCA GCCTGCATCC TGCCACCGG GCTCCACTTG GAGATCAGCA GGAGGGCCAG
TGTGGGACCC CTGCTGCCAC CTCTCTGGG CTTGTCTCTT TTCTGGAAAT TAAGAAGGTG TGCTCCAGAG CCAAGAGGAG
CAATAAGAAA CCTGTGTGC CAGCTTCTTA AGGGTGCAG TGCAAGACCC CA

SEQ ID NO:5: (Length of Sequence = 562 Nucleotides)

ATACCTTAC ATATATATTC ACAGAAAATC ATATTGCATA TACTCTTCT CCACATCATA AAAATGGGTG TTGGGCTCTC
TAGGACACAA GGAAGCAGG CCAATTTCT CATATTTCA GGAATAAAT GAGTGCCCG AAGGTGTAAT AGGAACCTTT
TACTAACCTC ATCTGACTTC ATCTCACAC CAGCATTTTG TGTGTAAGGA AACTGGCGA GAGTGGTTAA GAAATATATC
CAAAGACGTA TAGTCCAAA TGAACACGG ATCTTTTAT TTAAATCCA ATCATCTTTC CATTATATCA GCCAATGATG
GAGCAGAAAG CTGGTCCAGG CAATCCAGA ATAGATCTTT CTAGGCACCC GTTCAGTGTG AGGAGGGGGA AGTGGCCTTG
CCAAGGGGCC AGTGAGCTCA ATTAGGGTTA ACGCTGCTTC TTAGCCTACC CCAGGGGNC ACGCACCTAG GTTGTCTTGT
GCCAGCTTT GGCAGGAAGC ATCTCTCTT TCAAAGATTN NAGCCTTGG GTCATATATC GGGTGTATA GGGTCTTTT
TT

SEQ ID NO:6: (Length of Sequence = 359 Nucleotides)

ACATGTTCTC CCTCTTTCAA TTTTAGCAGT AATGTGATCC TCAAAAATGC ATTAATACTA GTTGAAGTAA ATAAACGGAA
GAGCTCCAAA ATGCTGTCAT TAAATGCATT TTTCCACACT AATGCCAATC ATCCAAAGCT ATTTTCAACA AGTCAGGTAT
TCAAAGCTAT TCACACCACT TGAAGAGTA ATTACCAATT ACTGAAGCAC TTATCTGTCC TACACTGATG GGAGTAAATG
CTTCTCATAG GTTATCTCAT GTACATTATG CCACCTTINAC TTAAAATGAT CACAATINAG TGCTATAGGT TTTTGGGTTA
ATGTTTTCCC NGGGGGAGTT GTTAAAAACA TGGCATTTC

SEQ ID NO:7: (Length of Sequence = 218 Nucleotides)

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SEQUENCE LISTING

(1) GENERAL INFORMATION:

(i) APPLICANT: Venter, J. Craig
Adams, Mark D.
Moreno, Ruben F.

(ii) TITLE OF INVENTION: Sequences Characteristic of Human Gene
Transcription Product

(iii) NUMBER OF SEQUENCES: 2412 (1-2421, with 9 SEQ ID NOS unused.)

(iv) CORRESPONDENCE ADDRESS:

(A) ADDRESSEE: Knobbe, Martens, Olson, and Bear
(B) STREET: 620 Newport Center Dr. Sixteenth Floor
(C) CITY: Newport Beach
(D) STATE: CA
(E) COUNTRY: USA
(F) ZIP: 92660

(v) COMPUTER READABLE FORM:

(A) MEDIUM TYPE: Floppy disk
(B) COMPUTER: IBM PC compatible
(C) OPERATING SYSTEM: PC-DOS/MS-DOS
(D) SOFTWARE: PatentIn Release #1.0, Version #1.25

(vi) CURRENT APPLICATION DATA:

(A) APPLICATION NUMBER: 07/837,195
(B) FILING DATE: 12-FEB-1992

(vii) PRIOR APPLICATION DATA:

(A) APPLICATION NUMBER: US 07/716,831
(B) FILING DATE: 20-JUN-1991

(viii) ATTORNEY/AGENT INFORMATION:

(A) NAME: Israelsen, Ned A.
(B) REGISTRATION NUMBER: 29,655
(C) REFERENCE/DOCKET NUMBER: NIH004.004CP1

(ix) TELECOMMUNICATION INFORMATION:

(A) TELEPHONE: 619-235-8550
(B) TELEFAX: 619-235-0176

SEQ ID NO:1: (Length of Sequence = 362 Nucleotides)

CTTCCCTTTT GTTCCCTCA GTGTCCCTTT TAATGCTTC CCTCCATTTT CCTTAGCAGC ATCCTAGTTG ATGGTCTGGG
TTATCAGAGG AGCAAAACA TTAAAGTGT AAATAATGCT CATGTCTCC CTGGGATTTC TAAACAGAAA AAATGAAGAA

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NOTE REGARDING SEQUENCE LISTINGS: The listings of SEQ ID NOS: 1-2421 are in numerical order. However, an occasional number (for example, SEQ ID NO: 44) is not found in this list. In all, 9 SEQ ID NOS are not used. Nevertheless, the convention "1-2421" is used, for example, to refer to all the SEQ ID NOS in the following list, while "1-315" is used, for example, to refer to all the listed sequences falling between SEQ ID NO 1 and SEQ ID NO 315.

SEQ ID	EST1	GB#	clone
392	EST101416	W73261	HRBA009
393	EST101417	W73262	HRBA007
394	EST101418	W73263	HRBA007
395	EST101419	W73264	HRBAA26
396	EST101420	W73265	HRBAA26
397	EST101421	W73266	HRBAA27
398	EST101422	W73267	HRBAA04
399	EST101423	W73268	HRBBA08
400	EST101424	W73269	HRBBA08
401	EST101425	W73270	HRBBA11
402	EST101426	W73271	HRBBA22
403	EST101427	W73272	HRBBA22
404	EST101428	W73273	HRBBA24
405	EST102714	M61178	HRBBA24
406	EST02714	M61179	HRIA223
407	EST00247	M62182	HRIA223
408	EST00273	M62211	HICG50
409			W73A76

EST#	SEQ ID	Clone	GB#
EST01304	2259	HCCPN52	M79156
EST01305	2260	HCCPN54	M79157
EST01306	2261	HCCPN60	M78162
EST01307	2262	HCCPN63	M79158
EST01308	2263	HCCPN64	M79159
EST01309	2264	HCCPN65	M79160
EST01310	2265	HCCPN67	M79161
EST01311	2266	HCCPN70	M78163
EST01312	2267	HCCPN76	M79163
EST01313	2268	HCCPN92	M79164
EST01314	2269	HCCPN96	M79165
EST01315	2270	HCCPN001	M79166
EST01316	2271	HCCPN003	M79169
EST01317	2272	HCCPN005	M78169
EST01318	2273	HCCPN006	M79167
EST01319	2274	HCCPN007	M86172
EST01320	2275	HCCPN08	M79168
EST01321	2276	HCCPN10	M79169
EST01322	2277	HCCPN19	M79170
EST01323	2278	HCCPN21	M79171
EST01324	2279	HCCPN22	M79172
EST01325	2280	HCCPN24	M78170
EST01326	2281	HCCPN25	M79173
EST01327	2282	HCCPN45	M78171
EST01328	2283	HCCPN51	M79174
EST01329	2284	HCCPN57	M79175
EST01330	2285	HCCPN64	M79176
EST01331	2286	HCCPN65	M78177
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EST01338	2293	HCCPN92	M79179
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EST01340	2295	HCCPN94	M79181
EST01341	2296	HCCPN95	M79182
EST01342	2297	HCCPN96	M78183
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EST01364	2319	HCCPN69	M79201
EST01365	2320	HCCPN76	M78191
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EST01411	79271	HCCPN95	M79262
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2073	EST01154	M78107	HCPR35	2205	EST01266	M78145	HCPR177
2074	EST01155	M78108	HCPR39	2206	EST01267	M79118	HCPR181
2075	EST01156	M79005	HCPR40	2207	EST01268	M79119	HCPR184
2076	EST01157	M86170	HCPR42	2208	EST01269	M79120	HCPR187
2077	EST01158	M79006	HCPR43	2209	EST01270	M79121	HCPR193
2078	EST01159	M79007	HCPR44	2210	EST01271	M79122	HCPR196
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2080	EST01161	M79009	HCPR46	2212	EST01273	M79124	HCPR203
2081	EST01162	M79010	HCPR47	2213	EST01274	M79125	HCPR206
2082	EST01163	M79011	HCPR48	2214	EST01275	M79126	HCPR210
2083	EST01164	M79012	HCPR49	2215	EST01276	M78147	HCPR217
2084	EST01165	M79013	HCPR50	2216	EST01277	M79127	HCPR222
2085	EST01166	M79014	HCPR51	2217	EST01278	M79128	HCPR224
2086	EST01167	M79015	HCPR52	2218	EST01279	M79129	HCPR230
2087	EST01168	M79016	HCPR53	2219	EST01280	M79130	HCPR231
2088	EST01169	M79017	HCPR54	2220	EST01281	M79131	HCPR232
2089	EST01170	M79018	HCPR55	2221	EST01282	M79132	HCPR233
2090	EST01171	M79019	HCPR56	2222	EST01283	M79133	HCPR234
2091	EST01172	M79020	HCPR57	2223	EST01284	M79134	HCPR235
2092	EST01173	M79021	HCPR58	2224	EST01285	M79135	HCPR236
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2097	EST01178	M79026	HCPR63	2229	EST01290	M79140	HCPR241
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2102	EST01183	M79031	HCPR68	2234	EST01295	M79145	HCPR246
2103	EST01184	M79032	HCPR69	2235	EST01296	M79146	HCPR247
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2105	EST01186	M79034	HCPR71	2237	EST01298	M79148	HCPR249
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2107	EST01188	M79036	HCPR73	2239	EST01300	M79150	HCPR251
2108	EST01189	M79037	HCPR74	2240	EST01301	M79151	HCPR252
2109	EST01190	M79038	HCPR75	2241	EST01302	M79152	HCPR253
2110	EST01191	M79039	HCPR76	2242	EST01303	M79153	HCPR254
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2112	EST01193	M79041	HCPR78	2244	EST01305	M79155	HCPR256
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2114	EST01195	M79043	HCPR80	2246	EST01307	M79157	HCPR258
2115	EST01196	M79044	HCPR81	2247	EST01308	M79158	HCPR259
2116	EST01197	M79045	HCPR82	2248	EST01309	M79159	HCPR260
2117	EST01198	M79046	HCPR83	2249	EST01310	M79160	HCPR261
2118	EST01199	M79047	HCPR84	2250	EST01311	M79161	HCPR262
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2121	EST01202	M79050	HCPR87	2253	EST01314	M79164	HCPR265
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2124	EST01205	M79053	HCPR90	2256	EST01317	M79167	HCPR268
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2127	EST01208	M79056	HCPR93	2259	EST01320	M79170	HCPR271
2128	EST01209	M79057	HCPR94	2260	EST01321	M79171	HCPR272
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2137	EST01218	M79066	HCPR103	2269	EST01330	M79180	HCPR281
2138	EST01219	M79067	HCPR104	2270	EST01331	M79181	HCPR282
2139	EST01220	M79068	HCPR105	2271	EST01332	M79182	HCPR283
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1804	EST01003	W78055	HCPC151	2020	EST01110	W78062	HCPC83
1805	EST01004	W78056	HCPC152	2021	EST01111	W78063	HCPC84
1806	EST01005	W78057	HCPC153	2022	EST01112	W78064	HCPC85
1807	EST01006	W78058	HCPC154	2023	EST01113	W78065	HCPC86
1808	EST01007	W78059	HCPC155	2024	EST01114	W78066	HCPC87
1809	EST01008	W78060	HCPC156	2025	EST01115	W78067	HCPC88
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1812	EST01011	W78063	HCPC159	2028	EST01118	W78070	HCPC91
1813	EST01012	W78064	HCPC160	2029	EST01119	W78071	HCPC92
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1817	EST01016	W78068	HCPC164	2033	EST01123	W78075	HCPC96
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1821	EST01020	W78072	HCPC168	2037	EST01127	W78079	HCPC00
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1828	EST01027	W78079	HCPC175	2044	EST01134	W78086	HCPC07
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1864	EST01063	W78115	HCPC211	2080	EST01170	W78122	HCPC43
1865	EST01064	W78116	HCPC212	2081	EST01171	W78123	HCPC44
1866	EST01065	W78117	HCPC213	2082	EST01172	W78124	HCPC45
1867	EST01066	W78118	HCPC214	2083	EST01173	W78125	HCPC46
1868	EST01067	W78119	HCPC215	2084	EST01174	W78126	HCPC47
1869	EST01068	W78120	HCPC216	2085	EST01175	W78127	HCPC48
1870	EST01069	W78121	HCPC217	2086	EST01176	W78128	HCPC49
1871	EST01070	W78122	HCPC218	2087	EST01177	W78129	HCPC50
1872	EST01071	W78123	HCPC219	2088	EST01178	W78130	HCPC51
1873	EST01072	W78124	HCPC220	2089	EST01179	W78131	HCPC52
1874	EST01073	W78125	HCPC221	2090	EST01180	W78132	HCPC53
1875	EST01074	W78126	HCPC222	2091	EST01181	W78133	HCPC54
1876	EST01075	W78127	HCPC223	2092	EST01182	W78134	HCPC55
1877	EST01076	W78128	HCPC224	2093	EST01183	W78135	HCPC56
1878	EST01077	W78129	HCPC225	2094	EST01184	W78136	HCPC57
1879	EST01078	W78130	HCPC226	2095	EST01185	W78137	HCPC58
1880	EST01079	W78131	HCPC227	2096	EST01186	W78138	HCPC59
1881	EST01080	W78132	HCPC228	2097	EST01187	W78139	HCPC60
1882	EST01081	W78133	HCPC229	2098	EST01188	W78140	HCPC61
1883	EST01082	W78134	HCPC230	2099	EST01189	W78141	HCPC62
1884	EST01083	W78135	HCPC231	2100	EST01190	W78142	HCPC63
1885	EST01084	W78136	HCPC232	2101	EST01191	W78143	HCPC64
1886	EST01085	W78137	HCPC233	2102	EST01192	W78144	HCPC65
1887	EST01086	W78138	HCPC234	2103	EST01193	W78145	HCPC66
1888	EST01087	W78139	HCPC235	2104	EST01194	W78146	HCPC67
1889	EST01088	W78140	HCPC236	2105	EST01195	W78147	HCPC68
1890	EST01089	W78141	HCPC237	2106	EST01196	W78148	HCPC69
1891	EST01090	W78142	HCPC238	2107	EST01197	W78149	HCPC70
1892	EST01091	W78143	HCPC239	2108	EST01198	W78150	HCPC71
1893	EST01092	W78144	HCPC240	2109	EST01199	W78151	HCPC72
1894	EST01093	W78145	HCPC241	2110	EST01200	W78152	HCPC73
1895	EST01094	W78146	HCPC242	2111	EST01201	W78153	HCPC74
1896	EST01095	W78147	HCPC243	2112	EST01202	W78154	HCPC75
1897	EST01096	W78148	HCPC244	2113	EST01203	W78155	HCPC76
1898	EST01097	W78149	HCPC245	2114	EST01204	W78156	HCPC77
1899	EST01098	W78150	HCPC246	2115	EST01205	W78157	HCPC78
1900	EST01099	W78151	HCPC247	2116	EST01206	W78158	HCPC79
1901	EST01100	W78152	HCPC248	2117	EST01207	W78159	HCPC80
1902	EST01101	W78153	HCPC249	2118	EST01208	W78160	HCPC81
1903	EST01102	W78154	HCPC250	2119	EST01209	W78161	HCPC82
1904	EST01103	W78155	HCPC251	2120	EST01210	W78162	HCPC83
1905	EST01104	W78156	HCPC252	2121	EST01211	W78163	HCPC84
1906	EST01105	W78157	HCPC253	2122	EST01212	W78164	HCPC85
1907	EST01106	W78158	HCPC254	2123	EST01213	W78165	HCPC86
1908	EST01107	W78159	HCPC255	2124	EST01214	W78166	HCPC87
1909	EST01108	W78160	HCPC256	2125	EST01215	W78167	HCPC88
1910	EST01109	W78161	HCPC257	2126	EST01216	W78168	HCPC89
1911	EST01110	W78162	HCPC258	2127	EST01217	W78169	HCPC90
1912	EST01111	W78163	HCPC259	2128	EST01218	W78170	HCPC91
1913	EST01112	W78164	HCPC260	2129	EST01219	W78171	HCPC92
1914	EST01113	W78165	HCPC261	2130	EST01220	W78172	HCPC93
1915	EST01114	W78166	HCPC262	2131	EST01221	W78173	HCPC94
1916	EST01115	W78167	HCPC263	2132	EST01222	W78174	HCPC95
1917	EST01116	W78168	HCPC264	2133	EST01223	W78175	HCPC96
1918	EST01117	W78169	HCPC265	2134	EST01224	W78176	HCPC97
1919	EST01118	W78170	HCPC266	2135	EST01225	W78177	HCPC98
1920	EST01119	W78171	HCPC267	2136	EST01226	W78178	HCPC99
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1924	EST01123	W78175	HCPC271	2140	EST01230	W78182	HCPC03
1925	EST01124	W78176	HCPC272	2141	EST01231	W78183	HCPC04
1926	EST01125	W78177	HCPC273	2142	EST01232	W78184	HCPC05
1927	EST01126	W78178	HCPC274	2143	EST01233	W78185	HCPC06
1928	EST01127	W78179	HCPC275	2144	EST01234	W78186	HCPC07
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1933	EST01132	W78184	HCPC280	2149	EST01239	W78191	HCPC12
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1935	EST01134	W78186	HCPC282	2151	EST01241	W78193	HCPC14
1936	EST01135	W78187	HCPC283	2152	EST01242	W78194	HCPC15
1937	EST01136	W78188	HCPC284	2153	EST01243	W78195	HCPC16
1938	EST01137	W78189	HCPC285	2154	EST01244	W78196	HCPC17
1939	EST01138	W78190	HCPC286	2155	EST01245	W78197	HCPC18
1940	EST01139	W78191	HCPC287	2156	EST01246	W78198	HCPC19
1941	EST01140	W78192	HCPC288	2157	EST01247	W78199	HCPC20
1942	EST01141	W78193	HCPC289	2158	EST01248	W78200	HCPC21
1943	EST01142	W78194	HCPC290	2159	EST01249	W78201	HCPC22
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1693	EST00848	M78700	HHCMD44	1759	EST00902	M78754	HHCHE22	1825	EST00955	M78807	HHCMD07
1694	EST00849	M78701	HHCMD47	1760	EST00903	M78755	HHCHE23	1826	EST00956	M78808	HHCMD08
1695	EST00850	M78702	HHCMD52	1761	EST01598	M78756	HHCHE24	1827	EST00957	M78809	HHCMD10
1696	EST00851	M78703	HHCMD52	1762	EST00904	M78757	HHCHE25	1828	EST00958	M78810	HHCMD11
1697	EST00852	M78704	HHCMD53	1763	EST00905	M78758	HHCHE26	1829	EST00959	M78811	HHCMD12
1698	EST02685	M86154	HHCMD54	1764	EST02690	M86158	HHCHE27	1830	EST01619	M78812	HHCMD13
1699	EST02686	M86155	HHCMD55	1765	EST01600	M78801	HHCHE29	1831	EST00960	M78813	HHCMD15
1700	EST01579	M77994	HHCMD56	1766	EST00906	M78759	HHCHE31	1832	EST00961	M78814	HHCMD16
1701	EST00853	M78705	HHCMD60	1767	EST00907	M78760	HHCHE33	1833	EST01620	M78815	HHCMD18
1702	EST00854	M78706	HHCMD63	1768	EST00908	M78761	HHCHE35	1834	EST00962	M78816	HHCMD21
1703	EST00855	M78707	HHCMD71	1769	EST00909	M78762	HHCHE37	1835	EST00963	M78817	HHCMD22
1704	EST01580	M77995	HHCMD72	1770	EST01601	M78763	HHCHE40	1836	EST00964	M78818	HHCMD25
1705	EST00856	M78708	HHCMD77	1771	EST00910	M78764	HHCHE45	1837	EST00965	M78819	HHCMD27
1706	EST00857	M78709	HHCMD78	1772	EST02691	M86159	HHCHE47	1838	EST00966	M78820	HHCMD30
1707	EST01581	M77996	HHCMD79	1773	EST00911	M78765	HHCHE48	1839	EST00967	M78821	HHCMD31
1708	EST00858	M78710	HHCMD82	1774	EST00912	M78766	HHCHE52	1840	EST00968	M78822	HHCMD36
1709	EST00859	M78711	HHCMD85	1775	EST02692	M86160	HHCHE53	1841	EST00969	M78823	HHCMD38
1710	EST00860	M78712	HHCMD87	1776	EST01603	M78767	HHCHE54	1842	EST00970	M78824	HHCMD40
1711	EST00861	M78713	HHCMD88	1777	EST00913	M78768	HHCHE56	1843	EST00971	M78825	HHCMD44
1712	EST00862	M78714	HHCMD88	1778	EST00914	M78769	HHCHE57	1844	EST00972	M78826	HHCMD45
1713	EST00863	M78715	HHCMD02	1779	EST00915	M78770	HHCHE58	1845	EST00973	M78827	HHCMD51
1714	EST00864	M78716	HHCMD04	1780	EST00916	M78771	HHCHE61	1846	EST00974	M78828	HHCMD53
1715	EST01583	M77998	HHCMD06	1781	EST00917	M78772	HHCHE65	1847	EST00975	M78829	HHCMD55
1716	EST00865	M78717	HHCMD08	1782	EST00918	M78773	HHCHE68	1848	EST00976	M78830	HHCMD63
1717	EST00866	M78718	HHCMD10	1783	EST00919	M78774	HHCHE69	1849	EST01621	M78831	HHCMD67
1718	EST00867	M78719	HHCMD15	1784	EST00920	M78775	HHCHE71	1850	EST00977	M78832	HHCMD68
1719	EST00868	M78720	HHCMD16	1785	EST00921	M78776	HHCHE73	1851	EST00978	M78833	HHCMD68
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1721	EST00870	M78722	HHCMD20	1787	EST00923	M78778	HHCHE91	1853	EST00980	M78835	HHCMD91
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1723	EST00872	M78724	HHCMD22	1789	EST00925	M78780	HHCHE95	1855	EST00982	M78837	HHCMD94
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1725	EST00874	M78726	HHCMD28	1791	EST00927	M78782	HHCHE04	1857	EST00984	M78839	HHCMD96
1726	EST01588	M78003	HHCMD29	1792	EST00928	M78783	HHCHE05	1858	EST00985	M78840	HHCMD96
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1728	EST00876	M78728	HHCMD31	1794	EST01607	M78785	HHCHE12	1860	EST00987	M78842	HHCMD108
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1733	EST01591	M78006	HHCMD39	1799	EST00934	M78790	HHCHE25	1865	EST00992	M78847	HHCMD125
1734	EST00880	M78732	HHCMD40	1800	EST00935	M78791	HHCHE27	1866	EST00993	M78848	HHCMD127
1735	EST00881	M78733	HHCMD49	1801	EST00936	M78792	HHCHE29	1867	EST00994	M78849	HHCMD129
1736	EST01592	M78007	HHCMD50	1802	EST00937	M78793	HHCHE33	1868	EST00995	M78850	HHCMD131
1737	EST00882	M78734	HHCMD53	1803	EST01613	M78794	HHCHE35	1869	EST00996	M78851	HHCMD133
1738	EST00883	M78735	HHCMD54	1804	EST00938	M78795	HHCHE37	1870	EST01633	M78852	HHCMD140
1739	EST00884	M78736	HHCMD54	1805	EST00939	M78796	HHCHE39	1871	EST01634	M78853	HHCMD142
1740	EST02687	M86156	HHCMD76	1806	EST00940	M78797	HHCHE41	1872	EST01635	M78854	HHCMD142
1741	EST00886	M78738	HHCMD77	1807	EST00941	M78798	HHCHE44	1873	EST00997	M78855	HHCMD142
1742	EST00887	M78739	HHCMD79	1808	EST00942	M78799	HHCHE47	1874	EST00998	M78856	HHCMD142
1743	EST00888	M78740	HHCMD80	1809	EST00943	M78800	HHCHE48	1875	EST00999	M78857	HHCMD142
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1751	EST00895	M78750	HHCMD93	1817	EST00950	M78807	HHCHE63				
1752	EST00896	M78751	HHCMD94	1818	EST01616	M78808	HHCHE66				
1753	EST00897	M78752	HHCMD96	1819	EST00951	M78809	HHCHE68				
1754	EST00898	M78753	HHCMD07	1820	EST00952	M78810	HHCHE69				
1755	EST00899	M78754	HHCMD10	1821	EST00953	M78811	HHCHE70				
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1502	EST02542	MB6017	HFBCY30	1636	EST02684	MB5317	HCMA37
1503	EST02543	MB6018	HFBCY31	1637	EST00796	MB78648	HCMA38
1504	EST02544	MB6019	HFBCY32	1638	EST00798	MB78650	HCMA39
1505	EST02545	MB6020	HFBCY33	1639	EST00799	MB78651	HCMA40
1506	EST02546	MB6021	HFBCY34	1640	EST00800	MB78652	HCMA41
1507	EST02547	MB6022	HFBCY35	1641	EST00801	MB78653	HCMA42
1508	EST02548	MB6023	HFBCY36	1642	EST00802	MB78654	HCMA43
1509	EST02549	MB6024	HFBCY37	1643	EST00803	MB78655	HCMA44
1510	EST02550	MB6025	HFBCY38	1644	EST01571	MB77986	HCMA45
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1512	EST02552	MB6027	HFBCY40	1646	EST00805	MB78657	HCMA47
1513	EST02553	MB6028	HFBCY41	1647	EST00806	MB78658	HCMA48
1514	EST02554	MB6029	HFBCY42	1648	EST00807	MB78659	HCMA49
1515	EST02555	MB6030	HFBCY43	1649	EST00808	MB78660	HCMA50
1516	EST02556	MB6031	HFBCY44	1650	EST00809	MB78661	HCMA51
1517	EST02557	MB6032	HFBCY45	1651	EST00810	MB78662	HCMA52
1518	EST02558	MB6033	HFBCY46	1652	EST00811	MB78663	HCMA53
1519	EST02559	MB6034	HFBCY47	1653	EST00812	MB78664	HCMA54
1520	EST02560	MB6035	HFBCY48	1654	EST01572	MB77987	HCMA55
1521	EST02561	MB6036	HFBCY49	1655	EST00813	MB78665	HCMA56
1522	EST02562	MB6037	HFBCY50	1656	EST00814	MB78666	HCMA57
1523	EST02563	MB6038	HFBCY51	1657	EST00815	MB78667	HCMA58
1524	EST02564	MB6039	HFBCY52	1658	EST00816	MB78668	HCMA59
1525	EST02565	MB6040	HFBCY53	1659	EST00817	MB78669	HCMA60
1526	EST02566	MB6041	HFBCY54	1660	EST00818	MB78670	HCMA61
1527	EST02567	MB6042	HFBCY55	1661	EST00819	MB78671	HCMA62
1528	EST02568	MB6043	HFBCY56	1662	EST00820	MB78672	HCMA63
1529	EST02569	MB6044	HFBCY57	1663	EST00821	MB78673	HCMA64
1530	EST02570	MB6045	HFBCY58	1664	EST00822	MB78674	HCMA65
1531	EST02571	MB6046	HFBCY59	1665	EST00823	MB78675	HCMA66
1532	EST02572	MB6047	HFBCY60	1666	EST00824	MB78676	HCMA67
1533	EST02573	MB6048	HFBCY61	1667	EST00825	MB78677	HCMA68
1534	EST02574	MB6049	HFBCY62	1668	EST00826	MB78678	HCMA69
1535	EST02575	MB6050	HFBCY63	1669	EST00827	MB78679	HCMA70
1536	EST02576	MB6051	HFBCY64	1670	EST00828	MB78680	HCMA71
1537	EST02577	MB6052	HFBCY65	1671	EST00829	MB78681	HCMA72
1538	EST02578	MB6053	HFBCY66	1672	EST00830	MB78682	HCMA73
1539	EST02579	MB6054	HFBCY67	1673	EST00831	MB78683	HCMA74
1540	EST02580	MB6055	HFBCY68	1674	EST00832	MB78684	HCMA75
1541	EST02581	MB6056	HFBCY69	1675	EST00833	MB78685	HCMA76
1542	EST02582	MB6057	HFBCY70	1676	EST00834	MB78686	HCMA77
1543	EST02583	MB6058	HFBCY71	1677	EST00835	MB78687	HCMA78
1544	EST02584	MB6059	HFBCY72	1678	EST00836	MB78688	HCMA79
1545	EST02585	MB6060	HFBCY73	1679	EST00837	MB78689	HCMA80
1546	EST02586	MB6061	HFBCY74	1680	EST00838	MB78690	HCMA81
1547	EST02587	MB6062	HFBCY75	1681	EST01573	MB77988	HCMA82
1548	EST02588	MB6063	HFBCY76	1682	EST00839	MB78691	HCMA83
1549	EST02589	MB6064	HFBCY77	1683	EST00840	MB78692	HCMA84
1550	EST02590	MB6065	HFBCY78	1684	EST00841	MB78693	HCMA85
1551	EST02591	MB6066	HFBCY79	1685	EST00842	MB78694	HCMA86
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1553	EST02593	MB6068	HFBCY81	1687	EST00843	MB78695	HCMA88
1554	EST02594	MB6069	HFBCY82	1688	EST00844	MB78696	HCMA89
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1556	EST02596	MB6071	HFBCY84	1690	EST00846	MB78698	HCMA91
1557	EST02597	MB6072	HFBCY85	1691	EST01577	MB77992	HCMA92
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[illegible]

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1133	EST02153	M85636	HFBC20	1199	EST02224	M85706	HFBCN33	1254	EST02283	M85762	HFBCN26
1134	EST02154	M85637	HFBC22	1200	EST02226	M85707	HFBCN34	1255	EST02284	M85763	HFBCN27
1135	EST02155	M85638	HFBC24	1201	EST02228	M85709	HFBCN35	1256	EST02285	M85764	HFBCN28
1136	EST02156	M85639	HFBC25	1202	EST02229	M85710	HFBCN36	1257	EST02286	M85765	HFBCN29
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1154	EST02175	M85657	HFBC53	1220	EST02249	M85728	HFBCN54	1275	EST02304	M85783	HFBCN47
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SUBSTITUTE SHEET

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947	EST01952	M85436	HFBC116	1013	EST02027	M85511	HFBCJ34	1079	EST02098	M85582	HFBCK38
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756	EST01541	M77957	HFBC73	888	EST01888	M85374	HFBC17	888	EST01888	M85374	HFBC17
757	EST01542	M77958	HFBC74	889	EST01889	M85375	HFBC18	889	EST01889	M85375	HFBC18
758	EST00724	M78576	HFBC77	890	EST01890	M85376	HFBC19	890	EST01890	M85376	HFBC19
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764	EST00729	M78581	HFBC85	896	EST01896	M85382	HFBC31	896	EST01896	M85382	HFBC31
765	EST00730	M78582	HFBC86	897	EST01897	M85383	HFBC33	897	EST01897	M85383	HFBC33
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769	EST00734	M78586	HFBC91	901	EST01901	M85387	HFBC37	901	EST01901	M85387	HFBC37
770	EST00735	M78587	HFBC93	902	EST01902	M85388	HFBC38	902	EST01902	M85388	HFBC38
771	EST01546	M77962	HFBC95	903	EST01903	M85389	HFBC39	903	EST01903	M85389	HFBC39
772	EST00736	M78588	HFBC96	904	EST01904	M85390	HFBC42	904	EST01904	M85390	HFBC42
773	EST01547	M77963	HFBC98	905	EST01905	M85391	HFBC43	905	EST01905	M85391	HFBC43
774	EST01548	M77964	HFBC99	906	EST01906	M85392	HFBC45	906	EST01906	M85392	HFBC45
775	EST00737	M78589	HFBC103	907	EST01907	M85393	HFBC46	907	EST01907	M85393	HFBC46
776	EST00738	M78590	HFBC109	908	EST01908	M85394	HFBC50	908	EST01908	M85394	HFBC50
777	EST00739	M78591	HFBC109	909	EST01909	M85395	HFBC56	909	EST01909	M85395	HFBC56
778	EST00740	M78592	HFBC110	910	EST01910	M85396	HFBC57	910	EST01910	M85396	HFBC57
779	EST00741	M78593	HFBC113	911	EST01911	M85397	HFBC58	911	EST01911	M85397	HFBC58
780	EST01549	M77965	HFBC114	912	EST01912	M85398	HFBC60	912	EST01912	M85398	HFBC60
781	EST01550	M77966	HFBC115	913	EST01913	M85399	HFBC61	913	EST01913	M85399	HFBC61
782	EST01551	M77967	HFBC116	914	EST01914	M85400	HFBC62	914	EST01914	M85400	HFBC62
783	EST01552	M77968	HFBC123	915	EST01915	M85401	HFBC63	915	EST01915	M85401	HFBC63
784	EST01852	M85338	HFBC141	916	EST01917	M85402	HFBC65	916	EST01917	M85402	HFBC65
785	EST01553	M77969	HFBC142	917	EST01919	M85404	HFBC68	917	EST01919	M85404	HFBC68
786	EST00742	M78594	HFBC143	918	EST01920	M85405	HFBC70	918	EST01920	M85405	HFBC70
787	EST00743	M78595	HFBC144	919	EST01921	M85406	HFBC71	919	EST01921	M85406	HFBC71
788	EST00744	M78596	HFBC145	920	EST01922	M85407	HFBC72	920	EST01922	M85407	HFBC72
789	EST00745	M78597	HFBC146	921	EST01923	M85408	HFBC73	921	EST01923	M85408	HFBC73
790	EST01554	M77970	HFBC147	922	EST01924	M85409	HFBC74	922	EST01924	M85409	HFBC74
791	EST00746	M78598	HFBC148	923	EST01925	M85410	HFBC76	923	EST01925	M85410	HFBC76
792	EST00747	M78599	HFBC149	924	EST01926	M85411	HFBC77	924	EST01926	M85411	HFBC77
793	EST00748	M78600	HFBC150	925	EST01927	M85412	HFBC78	925	EST01927	M85412	HFBC78
794	EST01555	M77971	HFBC151	926	EST01929	M85415	HFBC81	926	EST01929	M85415	HFBC81
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796	EST00750	M78602	HFBC153	928	EST01931	M85417	HFBC84	928	EST01931	M85417	HFBC84
797	EST00751	M78603	HFBC154	929	EST01932	M85418	HFBC86	929	EST01932	M85418	HFBC86
798	EST01853	M85339	HFBC155	930	EST01933	M85419	HFBC87	930	EST01933	M85419	HFBC87
799	EST00752	M78604	HFBC157	931	EST01934	M85420	HFBC89	931	EST01934	M85420	HFBC89
800	EST00753	M78605	HFBC158	932	EST01935	M85421	HFBC92	932	EST01935	M85421	HFBC92
801	EST00754	M78606	HFBC160	933	EST01936	M85422	HFBC93	933	EST01936	M85422	HFBC93
802	EST00755	M78607	HFBC161	934	EST01937	M85423	HFBC94	934	EST01937	M85423	HFBC94
803	EST00756	M78608	HFBC163	935	EST01938	M85424	HFBC95	935	EST01938	M85424	HFBC95
804	EST00757	M78609	HFBC168	936	EST01939	M85425	HFBC96	936	EST01939	M85425	HFBC96
805	EST00758	M78610	HFBC173	937	EST01940	M85426	HFBC101	937	EST01940	M85426	HFBC101
806	EST00759	M78611	HFBC174	938	EST01941	M85427	HFBC102	938	EST01941	M85427	HFBC102
807	EST00760	M78612	HFBC175	939	EST01943	M85428	HFBC105	939	EST01943	M85428	HFBC105
808	EST00761	M78613	HFBC179	940	EST01944	M85429	HFBC106	940	EST01944	M85429	HFBC106
809	EST00762	M78614	HFBC181								
810	EST00763	M78615	HFBC185								
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812	EST01854	M85340	HFBC187								
813	EST00765	M78617	HFBC188								
814	EST00766	M78618	HFBC189								
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565	EST00575	M78427	HFBCB93	631	EST00625	M78477	HFBCB89	697	EST00680	M78532	HFBCD88
566	EST00576	M78428	HFBCB94	632	EST00626	M78478	HFBCB90	698	EST00681	M78533	HFBCD89
567	EST00577	M78429	HFBCB96	633	EST00627	M78479	HFBCB91	699	EST00682	M78534	HFBCD90
568	EST00578	M78430	HFBCD01	634	EST00628	M78480	HFBCB92	700	EST00683	M78535	HFBCD91
569	EST00579	M78431	HFBCD02	635	EST00629	M78481	HFBCB93	701	EST01522	M77938	HFBCD92
570	EST00580	M78432	HFBCD03	636	EST01507	M77923	HFBCB94	702	EST00684	M78536	HFBCD93
571	EST00581	M78433	HFBCD04	637	EST00630	M78482	HFBCB95	703	EST00685	M78537	HFBCD94
572	EST00582	M78434	HFBCD05	638	EST00631	M78483	HFBCB96	704	EST00686	M78538	HFBCD95
573	EST00583	M78435	HFBCD06	639	EST00632	M78484	HFBCD00	705	EST00687	M78539	HFBCD96
574	EST00584	M78436	HFBCD07	640	EST01509	M77925	HFBCD06	706	EST00688	M78540	HFBCD97
575	EST00585	M78437	HFBCD11	641	EST00633	M78485	HFBCD07	707	EST01847	M85335	HFBCD98
576	EST00586	M78438	HFBCD13	642	EST00634	M78486	HFBCD08	708	EST00689	M78541	HFBCD99
577	EST00587	M78439	HFBCD14	643	EST00635	M78487	HFBCD09	709	EST00690	M78542	HFBCD00
578	EST00588	M78440	HFBCD15	644	EST00636	M78488	HFBCD10	710	EST00691	M78543	HFBCD01
579	EST00589	M78441	HFBCD16	645	EST00637	M78489	HFBCD11	711	EST00692	M78544	HFBCD02
580	EST00590	M78442	HFBCD17	646	EST00638	M78490	HFBCD12	712	EST00693	M78545	HFBCD03
581	EST00591	M78443	HFBCD18	647	EST00639	M78491	HFBCD13	713	EST00694	M78546	HFBCD04
582	EST00592	M78444	HFBCD19	648	EST00640	M78492	HFBCD14	714	EST00695	M78547	HFBCD05
583	EST00593	M78445	HFBCD20	649	EST00641	M78493	HFBCD15	715	EST01523	M77939	HFBCD06
584	EST00594	M78446	HFBCD21	650	EST00642	M78494	HFBCD16	716	EST01524	M77940	HFBCD07
585	EST00595	M78447	HFBCD22	651	EST00643	M78495	HFBCD17	717	EST01525	M77941	HFBCD08
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587	EST01488	M77904	HFBCD24	653	EST01510	M77926	HFBCD19	719	EST01526	M77942	HFBCD10
588	EST00597	M78449	HFBCD25	654	EST01512	M77928	HFBCD20	720	EST01527	M77943	HFBCD11
589	EST00598	M78450	HFBCD26	655	EST00645	M78497	HFBCD21	721	EST00697	M78549	HFBCD12
590	EST00599	M78451	HFBCD27	656	EST00646	M78498	HFBCD22	722	EST01528	M77944	HFBCD13
591	EST01489	M77905	HFBCD28	657	EST00647	M78499	HFBCD23	723	EST00698	M78550	HFBCD14
592	EST00600	M78452	HFBCD29	658	EST00648	M78500	HFBCD24	724	EST01529	M77945	HFBCD15
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594	EST01490	M77906	HFBCD31	660	EST00650	M78502	HFBCD26	726	EST00700	M78552	HFBCD17
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597	EST00603	M78455	HFBCD34	663	EST00653	M78505	HFBCD29	729	EST00703	M78555	HFBCD20
598	EST00604	M78456	HFBCD35	664	EST00654	M78506	HFBCD30	730	EST00704	M78556	HFBCD21
599	EST00605	M78457	HFBCD36	665	EST00655	M78507	HFBCD31	731	EST00705	M78557	HFBCD22
600	EST01492	M77908	HFBCD37	666	EST01514	M77930	HFBCD32	732	EST00706	M78558	HFBCD23
601	EST01493	M77909	HFBCD38	667	EST00656	M78508	HFBCD33	733	EST00707	M78559	HFBCD24
602	EST00606	M78458	HFBCD39	668	EST00657	M78509	HFBCD34	734	EST00708	M78560	HFBCD25
603	EST01494	M77910	HFBCD40	669	EST00658	M78510	HFBCD35	735	EST00709	M78561	HFBCD26
604	EST00607	M78459	HFBCD41	670	EST00659	M78511	HFBCD36	736	EST01532	M77948	HFBCD27
605	EST00608	M78460	HFBCD42	671	EST00660	M78512	HFBCD37	737	EST00710	M78542	HFBCD28
606	EST00609	M78461	HFBCD43	672	EST00661	M77931	HFBCD38	738	EST00711	M78563	HFBCD29
607	EST00610	M78462	HFBCD44	673	EST01515	M77932	HFBCD39	739	EST01534	M77950	HFBCD30
608	EST00611	M78463	HFBCD45	674	EST01516	M77933	HFBCD40	740	EST01535	M77951	HFBCD31
609	EST01496	M77912	HFBCD46	675	EST00662	M78513	HFBCD41	741	EST00712	M78564	HFBCD32
610	EST00612	M78464	HFBCD47	676	EST00663	M78514	HFBCD42	742	EST00713	M78565	HFBCD33
611	EST00613	M78465	HFBCD48	677	EST00664	M78515	HFBCD43	743	EST00714	M78566	HFBCD34
612	EST00614	M78466	HFBCD49	678	EST01517	M77934	HFBCD44	744	EST01537	M77953	HFBCD35
613	EST00615	M78467	HFBCD50	679	EST01518	M77935	HFBCD45	745	EST00715	M78567	HFBCD36
614	EST01842	M85332	HFBCD51	680	EST00665	M78516	HFBCD46	746	EST00716	M78568	HFBCD37
615	EST00616	M78468	HFBCD52	681	EST00666	M78517	HFBCD47	747	EST00717	M78569	HFBCD38
616	EST01497	M77913	HFBCD53	682	EST00667	M78518	HFBCD48	748	EST01850	M85337	HFBCD39
617	EST00617	M78469	HFBCD54	683	EST00668	M78519	HFBCD49	749	EST00719	M78571	HFBCD40
618	EST01498	M77914	HFBCD55	684	EST00669	M78520	HFBCD50	750	EST01539	M77955	HFBCD41
619	EST00619	M78471	HFBCD56	685	EST00670	M78521	HFBCD51	751	EST01540	M77956	HFBCD42
620	EST01499	M77915	HFBCD57	686	EST00671	M78522	HFBCD52	752	EST00720	M78572	HFBCD43
621	EST00620	M78472	HFBCD58	687	EST00672	M78523	HFBCD53				
622	EST01843	M85333	HFBCD59	688	EST00673	M78524	HFBCD54				
623	EST00621	M78473	HFBCD60	689	EST00674	M78525	HFBCD55				
624	EST01500	M77916	HFBCD61	690	EST00675	M78526	HFBCD56				
625	EST01844	M85334	HFBCD62	691	EST00676	M78527	HFBCD57				
626	EST00622	M78474	HFBCD63	692	EST00677	M78528	HFBCD58				
627	EST00623	M77919	HFBCD64	693	EST00678	M78529	HFBCD59				
628	EST01503	M78476	HFBCD65	694	EST00679	M78530	HFBCD60				
629	EST00624	M78477	HFBCD66			M78531	HFBCD61				

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374	EST00428	W78280	HFBA30	440	EST01454	W7870	HFCA22	507	EST00530	W78382	HFCA22
375	EST00429	W78281	HFBA32	441	EST00481	W78333	HFCA24	508	EST00531	W78383	HFCA24
376	EST01436	W7852	HFBA33	442	EST01456	W7872	HFCA26	509	EST01472	W7888	HFCA26
377	EST00430	W78282	HFBA34	443	EST00482	W78334	HFCA27	510	EST00532	W78384	HFCA27
378	EST00431	W78283	HFBA37	444	EST00483	W78335	HFCA28	511	EST00533	W78385	HFCA28
379	EST00432	W78284	HFBA38	445	EST00484	W78336	HFCA30	512	EST00534	W78386	HFCA30
380	EST01439	W7855	HFBA40	446	EST00485	W78337	HFCA31	513	EST00535	W78387	HFCA31
381	EST00433	W78285	HFBA41	447	EST00486	W78338	HFCA32	514	EST00536	W78388	HFCA32
382	EST00434	W78286	HFBA42	448	EST00487	W78339	HFCA33	515	EST00537	W78389	HFCA33
383	EST00435	W78287	HFBA43	449	EST00488	W78340	HFCA34	516	EST00538	W78390	HFCA34
384	EST01440	W7856	HFBA44	450	EST00489	W78341	HFCA35	517	EST00539	W78391	HFCA35
385	EST00436	W78288	HFBA45	451	EST00490	W78342	HFCA36	518	EST00540	W78392	HFCA36
386	EST00437	W78289	HFBA47	452	EST00491	W78343	HFCA37	519	EST00541	W78393	HFCA37
387	EST00438	W78290	HFBA48	453	EST00492	W78344	HFCA38	520	EST00542	W78394	HFCA38
388	EST00439	W78291	HFBA49	454	EST00493	W78345	HFCA39	521	EST01474	W7890	HFCA39
389	EST00440	W78292	HFBA51	455	EST00494	W78346	HFCA40	522	EST00543	W7891	HFCA40
390	EST01442	W7858	HFBA52	456	EST01835	W8326	HFCA41	523	EST01838	W8329	HFCA41
391	EST00441	W78293	HFBA53	457	EST00495	W78347	HFCA42	524	EST00544	W78396	HFCA42
392	EST00442	W78294	HFBA54	458	EST00496	W78348	HFCA43	525	EST00545	W78397	HFCA43
393	EST00443	W78295	HFBA56	459	EST00497	W78349	HFCA44	526	EST00546	W78398	HFCA44
394	EST00444	W78296	HFBA57	460	EST01457	W78350	HFCA45	527	EST00547	W78399	HFCA45
395	EST00445	W78297	HFBA58	461	EST00498	W78351	HFCA46	528	EST00548	W78400	HFCA46
396	EST01443	W7859	HFBA59	462	EST00499	W78352	HFCA47	529	EST00549	W78401	HFCA47
397	EST00446	W78298	HFBA60	463	EST01459	W78353	HFCA49	530	EST01477	W7893	HFCA49
398	EST00447	W78299	HFBA61	464	EST00500	W78354	HFCA50	531	EST00550	W78402	HFCA50
399	EST00448	W78300	HFBA62	465	EST00501	W78355	HFCA51	532	EST00551	W78403	HFCA51
400	EST00449	W78301	HFBA63	466	EST00502	W78356	HFCA52	533	EST00552	W78404	HFCA52
401	EST00450	W78302	HFBA64	467	EST00503	W78357	HFCA54	534	EST01478	W7894	HFCA54
402	EST00451	W78303	HFBA65	468	EST00504	W78358	HFCA55	535	EST00553	W78405	HFCA55
403	EST00452	W78304	HFBA66	469	EST01460	W78359	HFCA56	536	EST00554	W78406	HFCA56
404	EST00453	W78305	HFBA67	470	EST00505	W78360	HFCA58	537	EST00555	W78407	HFCA58
405	EST00454	W78306	HFBA68	471	EST00506	W78361	HFCA59	538	EST00556	W78408	HFCA59
406	EST00455	W78307	HFBA69	472	EST00507	W78362	HFCA60	539	EST00557	W78409	HFCA60
407	EST00456	W78308	HFBA70	473	EST00508	W78363	HFCA61	540	EST00558	W78410	HFCA61
408	EST00457	W78309	HFBA71	474	EST00509	W78364	HFCA62	541	EST00559	W78411	HFCA62
409	EST01444	W7860	HFBA72	475	EST00510	W78365	HFCA63	542	EST00560	W78412	HFCA63
410	EST00458	W78310	HFBA74	476	EST01463	W7880	HFCA64	543	EST00561	W78413	HFCA64
411	EST00459	W78311	HFBA76	477	EST00511	W78366	HFCA65	544	EST00562	W78414	HFCA65
412	EST01445	W7861	HFBA77	478	EST00512	W78367	HFCA66	545	EST00563	W78415	HFCA66
413	EST01446	W7862	HFBA80	480	EST01464	W78368	HFCA67	546	EST00564	W78416	HFCA67
414	EST00460	W78312	HFBA81	481	EST01465	W78369	HFCA68	547	EST00565	W78417	HFCA68
415	EST00461	W78313	HFBA82	482	EST01466	W78370	HFCA69	548	EST00566	W78418	HFCA69
416	EST00462	W78314	HFBA83	483	EST00513	W78371	HFCA70	549	EST00567	W78419	HFCA70
417	EST00463	W78315	HFBA84	484	EST00514	W78372	HFCA71	550	EST00568	W78420	HFCA71
418	EST00464	W78316	HFBA85	485	EST01467	W78373	HFCA72	551	EST00569	W78421	HFCA72
419	EST00465	W78317	HFBA86	486	EST00515	W78374	HFCA73	552	EST00570	W78422	HFCA73
420	EST00466	W78318	HFBA87	487	EST00516	W78375	HFCA74	553	EST00571	W78423	HFCA74
421	EST00467	W78319	HFBA88	488	EST00517	W78376	HFCA75	554	EST00572	W78424	HFCA75
422	EST01447	W7863	HFBA89	489	EST00518	W78377	HFCA76	555	EST00573	W78425	HFCA76
423	EST00468	W78320	HFBA90	490	EST00519	W78378	HFCA77				
424	EST01448	W7864	HFBA91	491	EST00520	W78379	HFCA78				
425	EST00469	W78321	HFBA92	492	EST00521	W78380	HFCA79				
426	EST00470	W78322	HFBA93	493	EST00522	W78381	HFCA80				
427	EST01449	W7865	HFBA94	494	EST00523	W78382	HFCA81				
428	EST01450	W7866	HFBA95	495	EST00524	W78383	HFCA82				
429	EST00471	W78323	HFBA96	496	EST00525	W78384	HFCA83				
430	EST00472	W78324	HFBA97	497	EST00526	W78385	HFCA84				
431	EST00473	W78325	HFBA98	498	EST01468	W78386	HFCA85				
432	EST01452	W7868	HFBA99	499	EST00527	W78387	HFCA86				
433	EST00474	W78326	HFBA10	500	EST00528	W78388	HFCA87				
434	EST00475	W78327	HFBA11	501	EST02715	W7884	HFCA88				
435	EST00476	W78328	HFBA12	502	EST01469	W7885	HFCA89				
436	EST00477	W78329	HFBA13	503	EST00529	W7886	HFCA90				
437	EST00478	W78330	HFBA14	504	EST00530	W7887	HFCA91				
438	EST00479	W78331	HFBA15	505	EST01837	W8328	HFCA92				
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183	EST00148	M62089	HHC161	318	EST00380	M78232	HEFBA01	318	EST00380	M78232	HEFBA01	318	EST00380	M78232	HEFBA01
184	EST00149	M62090	HHC162	319	EST00381	M78233	HEFBA02	319	EST00381	M78233	HEFBA02	319	EST00381	M78233	HEFBA02
185	EST00150	M62091	HHC163	320	EST00382	M78234	HEFBA03	320	EST00382	M78234	HEFBA03	320	EST00382	M78234	HEFBA03
186	EST00151	M62092	HHC164	321	EST00383	M78235	HEFBA04	321	EST00383	M78235	HEFBA04	321	EST00383	M78235	HEFBA04
187	EST00152	M62093	HHC165	322	EST00384	M78236	HEFBA05	322	EST00384	M78236	HEFBA05	322	EST00384	M78236	HEFBA05
188	EST00256	M62195	HHC166	323	EST00385	M78237	HEFBA06	323	EST00385	M78237	HEFBA06	323	EST00385	M78237	HEFBA06
189	EST00282	M62196	HHC167	324	EST00386	M78238	HEFBA07	324	EST00386	M78238	HEFBA07	324	EST00386	M78238	HEFBA07
190	EST00153	M62094	HHC168	325	EST00387	M78239	HEFBA08	325	EST00387	M78239	HEFBA08	325	EST00387	M78239	HEFBA08
191	EST00154	M62095	HHC169	326	EST00388	M78240	HEFBA09	326	EST00388	M78240	HEFBA09	326	EST00388	M78240	HEFBA09
192	EST00155	M62096	HHC170	327	EST00389	M78241	HEFBA10	327	EST00389	M78241	HEFBA10	327	EST00389	M78241	HEFBA10
193	EST00156	M62097	HHC171	328	EST00390	M78242	HEFBA11	328	EST00390	M78242	HEFBA11	328	EST00390	M78242	HEFBA11
194	EST00157	M62098	HHC172	329	EST00391	M78243	HEFBA12	329	EST00391	M78243	HEFBA12	329	EST00391	M78243	HEFBA12
195	EST00158	M62099	HHC173	330	EST00392	M78244	HEFBA13	330	EST00392	M78244	HEFBA13	330	EST00392	M78244	HEFBA13
196	EST00159	M62100	HHC174	331	EST00393	M78245	HEFBA14	331	EST00393	M78245	HEFBA14	331	EST00393	M78245	HEFBA14
197	EST00160	M62101	HHC175	332	EST00394	M78246	HEFBA15	332	EST00394	M78246	HEFBA15	332	EST00394	M78246	HEFBA15
198	EST00161	M62102	HHC176	333	EST00395	M78247	HEFBA16	333	EST00395	M78247	HEFBA16	333	EST00395	M78247	HEFBA16
199	EST00162	M62103	HHC177	334	EST00396	M78248	HEFBA17	334	EST00396	M78248	HEFBA17	334	EST00396	M78248	HEFBA17
200	EST00163	M62104	HHC178	335	EST00397	M78249	HEFBA18	335	EST00397	M78249	HEFBA18	335	EST00397	M78249	HEFBA18
201	EST00164	M62105	HHC179	336	EST00398	M78250	HEFBA19	336	EST00398	M78250	HEFBA19	336	EST00398	M78250	HEFBA19
202	EST00165	M62106	HHC180	337	EST00399	M78251	HEFBA20	337	EST00399	M78251	HEFBA20	337	EST00399	M78251	HEFBA20
203	EST00166	M62107	HHC181	338	EST00400	M78252	HEFBA21	338	EST00400	M78252	HEFBA21	338	EST00400	M78252	HEFBA21
204	EST00167	M62108	HHC182	339	EST00401	M78253	HEFBA22	339	EST00401	M78253	HEFBA22	339	EST00401	M78253	HEFBA22
205	EST00168	M62109	HHC183	340	EST00402	M78254	HEFBA23	340	EST00402	M78254	HEFBA23	340	EST00402	M78254	HEFBA23
206	EST00169	M62110	HHC184	341	EST00403	M78255	HEFBA24	341	EST00403	M78255	HEFBA24	341	EST00403	M78255	HEFBA24
207	EST00170	M62111	HHC185	342	EST00404	M78256	HEFBA25	342	EST00404	M78256	HEFBA25	342	EST00404	M78256	HEFBA25
208	EST00171	M62112	HHC186	343	EST00405	M78257	HEFBA26	343	EST00405	M78257	HEFBA26	343	EST00405	M78257	HEFBA26
209	EST00172	M62113	HHC187	344	EST00406	M78258	HEFBA27	344	EST00406	M78258	HEFBA27	344	EST00406	M78258	HEFBA27
210	EST00173	M62114	HHC188	345	EST00407	M78259	HEFBA28	345	EST00407	M78259	HEFBA28	345	EST00407	M78259	HEFBA28
211	EST00174	M62115	HHC189	346	EST00408	M78260	HEFBA29	346	EST00408	M78260	HEFBA29	346	EST00408	M78260	HEFBA29
212	EST00175	M62116	HHC190	347	EST00409	M78261	HEFBA30	347	EST00409	M78261	HEFBA30	347	EST00409	M78261	HEFBA30
213	EST00176	M62117	HHC191	348	EST00410	M78262	HEFBA31	348	EST00410	M78262	HEFBA31	348	EST00410	M78262	HEFBA31
214	EST00177	M62118	HHC192	349	EST00411	M78263	HEFBA32	349	EST00411	M78263	HEFBA32	349	EST00411	M78263	HEFBA32
215	EST00178	M62119	HHC193	350	EST00412	M78264	HEFBA33	350	EST00412	M78264	HEFBA33	350	EST00412	M78264	HEFBA33
216	EST00179	M62120	HHC194	351	EST00413	M78265	HEFBA34	351	EST00413	M78265	HEFBA34	351	EST00413	M78265	HEFBA34
217	EST00180	M62121	HHC195	352	EST00414	M78266	HEFBA35	352	EST00414	M78266	HEFBA35	352	EST00414	M78266	HEFBA35
218	EST00181	M62122	HHC196	353	EST00415	M78267	HEFBA36	353	EST00415	M78267	HEFBA36	353	EST00415	M78267	HEFBA36
219	EST00182	M62123	HHC197	354	EST00416	M78268	HEFBA37	354	EST00416	M78268	HEFBA37	354	EST00416	M78268	HEFBA37
220	EST00183	M62124	HHC198	355	EST00417	M78269	HEFBA38	355	EST00417	M78269	HEFBA38	355	EST00417	M78269	HEFBA38
221	EST00184	M62125	HHC199	356	EST00418	M78270	HEFBA39	356	EST00418	M78270	HEFBA39	356	EST00418	M78270	HEFBA39
222	EST00185	M62126	HHC200	357	EST00419	M78271	HEFBA40	357	EST00419	M78271	HEFBA40	357	EST00419	M78271	HEFBA40
223	EST00186	M62127	HHC201	358	EST00420	M78272	HEFBA41	358	EST00420	M78272	HEFBA41	358	EST00420	M78272	HEFBA41
224	EST00187	M62128	HHC202	359	EST00421	M78273	HEFBA42	359	EST00421	M78273	HEFBA42	359	EST00421	M78273	HEFBA42
225	EST00188	M62129	HHC203	360	EST00422	M78274	HEFBA43	360	EST00422	M78274	HEFBA43	360	EST00422	M78274	HEFBA43
226	EST00189	M62130	HHC204	361	EST00423	M78275	HEFBA44	361	EST00423	M78275	HEFBA44	361	EST00423	M78275	HEFBA44
227	EST00190	M62131	HHC205	362	EST00424	M78276	HEFBA45	362	EST00424	M78276	HEFBA45	362	EST00424	M78276	HEFBA45
228	EST00191	M62132	HHC206	363	EST00425	M78277	HEFBA46	363	EST00425	M78277	HEFBA46	363	EST00425	M78277	HEFBA46
229	EST00192	M62133	HHC207	364	EST00426	M78278	HEFBA47	364	EST00426	M78278	HEFBA47	364	EST00426	M78278	HEFBA47
230	EST00193	M62134	HHC208	365	EST00427	M78279	HEFBA48	365	EST00427	M78279	HEFBA48	365	EST00427	M78279	HEFBA48
231	EST00194	M62135	HHC209	366	EST00428	M78280	HEFBA49	366	EST00428	M78280	HEFBA49	366	EST00428	M78280	HEFBA49
232	EST00195	M62136	HHC210	367	EST00429	M78281	HEFBA50	367	EST00429	M78281	HEFBA50	367	EST00429	M78281	HEFBA50
233	EST00196	M62137	HHC211	368	EST00430	M78282	HEFBA51	368	EST00430	M78282	HEFBA51	368	EST00430	M78282	HEFBA51
234	EST00197	M62138	HHC212	369	EST00431	M78283	HEFBA52	369	EST00431	M78283	HEFBA52	369	EST00431	M78283	HEFBA52
235	EST00198	M62139	HHC213	370	EST00432	M78284	HEFBA53	370	EST00432	M78284	HEFBA53	370	EST00432	M78284	HEFBA53
236	EST00199	M62140	HHC214	371	EST00433	M78285	HEFBA54	371	EST00433	M78285	HEFBA54	371	EST00433	M78285	HEFBA54
237	EST00200	M62141	HHC215	372	EST00434	M78286	HEFBA55	372	EST00434	M78286	HEFBA55	372	EST00434	M78286	HEFBA55
238	EST00201	M62142	HHC216	373	EST00435	M78287	HEFBA56	373	EST00435	M78287	HEFBA56	373	EST00435	M78287	HEFBA56
239	EST00202	M62143	HHC217	374	EST00436	M78288	HEFBA57	374	EST00436	M78288	HEFBA57	374	EST00436	M78288	HEFBA57
240	EST00203	M62144	HHC218	375	EST00437	M78289	HEFBA58	375	EST00437	M78289	HEFBA58	375	EST00437	M78289	HEFBA58
241	EST00204	M62145	HHC219	376	EST00438	M78290	HEFBA59	376	EST00438	M78290	HEFBA59	376	EST00438	M78290	HEFBA59
242	EST00205	M62146	HHC220	377	EST00439	M78291	HEFBA60	377	EST00439	M78291	HEFBA60	377	EST00439	M78291	HEFBA60
243	EST00206	M62147	HHC221	378	EST00440	M78292	HEFBA61	378	EST00440	M78292	HEFBA61	378	EST00440	M78292	HEFBA61
244	EST00207	M62148	HHC222	379	EST00441	M78293	HEFBA62	379	EST00441	M78293	HEFBA62	379	EST00441	M78293	HEFBA62
245	EST00208	M62149	HHC223	380	EST00442	M78294	HEFBA63	380	EST00442	M78294	HEFBA63	380	EST00442	M78294	HEFBA63
246	EST00209	M62150	HHC224	381	EST00443	M78295	HEFBA64	381	EST00443	M78295	HEFBA64	381	EST00443	M78295	HEFBA64
247	EST00210	M62151	HHC225	382	EST00444	M78296	HEFBA65	382	EST00444	M78296	HEFBA65	382	EST00444	M78296	HEFBA65
248	EST00211	M62152	HHC226	383	EST00445	M78297	HEFBA66	383	EST00445	M78297	HEFBA66	383	EST00445	M78297	HEFBA66

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Table 12. SEQ ID NO Cross References

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2	EST00008	M61953	HFA05	65	EST00067	M62011	HNC18	129	EST00253	M62192	HNC60	139	EST00253	M62192	HNC60	139	EST00253	M62192	HNC60
3	EST00010	M61961	HFA07	66	EST00068	M62012	HNC21	130	EST00254	M62193	HNC63	140	EST00254	M62193	HNC63	140	EST00254	M62193	HNC63
4	EST00011	M61962	HFA08	67	EST00069	M62013	HNC22	131	EST00255	M62194	HNC66	141	EST00255	M62194	HNC66	141	EST00255	M62194	HNC66
5	EST00012	M61963	HFA10	68	EST00070	M62014	HNC23	132	EST00256	M62195	HNC67	142	EST00256	M62195	HNC67	142	EST00256	M62195	HNC67
6	EST00013	M61964	HFA11	69	EST00071	M62015	HNC24	133	EST00257	M62196	HNC68	143	EST00257	M62196	HNC68	143	EST00257	M62196	HNC68
7	EST00014	M61965	HFA20	70	EST00072	M62016	HNC25	134	EST00258	M62197	HNC69	144	EST00258	M62197	HNC69	144	EST00258	M62197	HNC69
8	EST00015	M61966	HFA26	71	EST00073	M62017	HNC26	135	EST00259	M62198	HNC70	145	EST00259	M62198	HNC70	145	EST00259	M62198	HNC70
9	EST00016	M61967	HFA23	72	EST00074	M62018	HNC27	136	EST00260	M62199	HNC71	146	EST00260	M62199	HNC71	146	EST00260	M62199	HNC71
10	EST00017	M61968	HFA36	73	EST00075	M62019	HNC28	137	EST00261	M62200	HNC72	147	EST00261	M62200	HNC72	147	EST00261	M62200	HNC72
11	EST00018	M61968	HFA36	74	EST00076	M62020	HNC29	138	EST00262	M62201	HNC73	148	EST00262	M62201	HNC73	148	EST00262	M62201	HNC73
12	EST00019	M61968	HFA36	75	EST00077	M62021	HNC30	139	EST00263	M62202	HNC74	149	EST00263	M62202	HNC74	149	EST00263	M62202	HNC74
13	EST00020	M61968	HFA36	76	EST00078	M62022	HNC31	140	EST00264	M62203	HNC75	150	EST00264	M62203	HNC75	150	EST00264	M62203	HNC75
14	EST00021	M61968	HFA36	77	EST00079	M62023	HNC32	141	EST00265	M62204	HNC76	151	EST00265	M62204	HNC76	151	EST00265	M62204	HNC76
15	EST00022	M61968	HFA36	78	EST00080	M62024	HNC33	142	EST00266	M62205	HNC77	152	EST00266	M62205	HNC77	152	EST00266	M62205	HNC77
16	EST00023	M61968	HFA36	79	EST00081	M62025	HNC34	143	EST00267	M62206	HNC78	153	EST00267	M62206	HNC78	153	EST00267	M62206	HNC78
17	EST00024	M61968	HFA36	80	EST00082	M62026	HNC35	144	EST00268	M62207	HNC79	154	EST00268	M62207	HNC79	154	EST00268	M62207	HNC79
18	EST00025	M61968	HFA36	81	EST00083	M62027	HNC36	145	EST00269	M62208	HNC80	155	EST00269	M62208	HNC80	155	EST00269	M62208	HNC80
19	EST00026	M61968	HFA36	82	EST00084	M62028	HNC37	146	EST00270	M62209	HNC81	156	EST00270	M62209	HNC81	156	EST00270	M62209	HNC81
20	EST00027	M61968	HFA36	83	EST00085	M62029	HNC38	147	EST00271	M62210	HNC82	157	EST00271	M62210	HNC82	157	EST00271	M62210	HNC82
21	EST00028	M61968	HFA36	84	EST00086	M62030	HNC39	148	EST00272	M62211	HNC83	158	EST00272	M62211	HNC83	158	EST00272	M62211	HNC83
22	EST00029	M61968	HFA36	85	EST00087	M62031	HNC40	149	EST00273	M62212	HNC84	159	EST00273	M62212	HNC84	159	EST00273	M62212	HNC84
23	EST00030	M61968	HFA36	86	EST00088	M62032	HNC41	150	EST00274	M62213	HNC85	160	EST00274	M62213	HNC85	160	EST00274	M62213	HNC85
24	EST00031	M61968	HFA36	87	EST00089	M62033	HNC42	151	EST00275	M62214	HNC86	161	EST00275	M62214	HNC86	161	EST00275	M62214	HNC86
25	EST00032	M61968	HFA36	88	EST00090	M62034	HNC43	152	EST00276	M62215	HNC87	162	EST00276	M62215	HNC87	162	EST00276	M62215	HNC87
26	EST00033	M61968	HFA36	89	EST00091	M62035	HNC44	153	EST00277	M62216	HNC88	163	EST00277	M62216	HNC88	163	EST00277	M62216	HNC88
27	EST00034	M61968	HFA36	90	EST00092	M62036	HNC45	154	EST00278	M62217	HNC89	164	EST00278	M62217	HNC89	164	EST00278	M62217	HNC89
28	EST00035	M61968	HFA36	91	EST00093	M62037	HNC46	155	EST00279	M62218	HNC90	165	EST00279	M62218	HNC90	165	EST00279	M62218	HNC90
29	EST00036	M61968	HFA36	92	EST00094	M62038	HNC47	156	EST00280	M62219	HNC91	166	EST00280	M62219	HNC91	166	EST00280	M62219	HNC91
30	EST00037	M61968	HFA36	93	EST00095	M62039	HNC48	157	EST00281	M62220	HNC92	167	EST00281	M62220	HNC92	167	EST00281	M62220	HNC92
31	EST00038	M61968	HFA36	94	EST00096	M62040	HNC49	158	EST00282	M62221	HNC93	168	EST00282	M62221	HNC93	168	EST00282	M62221	HNC93
32	EST00039	M61968	HFA36	95	EST00097	M62041	HNC50	159	EST00283	M62222	HNC94	169	EST00283	M62222	HNC94	169	EST00283	M62222	HNC94
33	EST00040	M61968	HFA36	96	EST00098	M62042	HNC51	160	EST00284	M62223	HNC95	170	EST00284	M62223	HNC95	170	EST00284	M62223	HNC95
34	EST00041	M61968	HFA36	97	EST00099	M62043	HNC52	161	EST00285	M62224	HNC96	171	EST00285	M62224	HNC96	171	EST00285	M62224	HNC96
35	EST00042	M61968	HFA36	98	EST00100	M62044	HNC53	162	EST00286	M62225	HNC97	172	EST00286	M62225	HNC97	172	EST00286	M62225	HNC97
36	EST00043	M61968	HFA36	99	EST00101	M62045	HNC54	163	EST00287	M62226	HNC98	173	EST00287	M62226	HNC98	173	EST00287	M62226	HNC98
37	EST00044	M61968	HFA36	100	EST00102	M62046	HNC55	164	EST00288	M62227	HNC99	174	EST00288	M62227	HNC99	174	EST00288	M62227	HNC99
38	EST00045	M61968	HFA36	101	EST00103	M62047	HNC56	165	EST00289	M62228	HNC00	175	EST00289	M62228	HNC00	175	EST00289	M62228	HNC00
39	EST00046	M61968	HFA36	102	EST00104	M62048	HNC57	166	EST00290	M62229	HNC01	176	EST00290	M62229	HNC01	176	EST00290	M62229	HNC01
40	EST00047	M61968	HFA36	103	EST00105	M62049	HNC58	167	EST00291	M62230	HNC02	177	EST00291	M62230	HNC02	177	EST00291	M62230	HNC02
41	EST00048	M61968	HFA36	104	EST00106	M62050	HNC59	168	EST00292	M62231	HNC03	178	EST00292	M62231	HNC03	178	EST00292	M62231	HNC03
42	EST00049	M61968	HFA36	105	EST00107	M62051	HNC60	169	EST00293	M62232	HNC04	179	EST00293	M62232	HNC04	179	EST00293	M62232	HNC04
43	EST00050	M61968	HFA36	106	EST00108	M62052	HNC61	170	EST00294	M62233	HNC05	180	EST00294	M62233	HNC05	180	EST00294	M62233	HNC05
44	EST00051	M61968	HFA36	107	EST00109	M62053	HNC62	171	EST00295	M62234	HNC06	181	EST00295	M62234	HNC06	181	EST00295	M62234	HNC06
45	EST00052	M61968	HFA36	108	EST00110	M62054	HNC63	172	EST00296	M62235	HNC07		EST00296	M62235	HNC07		EST00296	M62235	HNC07
46	EST00053	M61968	HFA36	109	EST00111	M62055	HNC64	173	EST00297	M62236	HNC08		EST00297	M62236	HNC08		EST00297	M62236	HNC08
47	EST00054	M61968	HFA36	110	EST00112	M62056	HNC65	174	EST00298	M62237	HNC09		EST00298	M62237	HNC09		EST00298	M62237	HNC09
48	EST00055	M61968	HFA36	111	EST00113	M62057	HNC66	175	EST00299	M62238	HNC10		EST00299	M62238	HNC10		EST00299	M62238	HNC10
49	EST00056	M61968	HFA36	112	EST00114	M62058	HNC67	176	EST00300	M62239	HNC11		EST00300	M62239	HNC11		EST00300	M62239	HNC11
50	EST00057	M61968	HFA36	113	EST00115	M62059	HNC68	177	EST00301	M62240	HNC12		EST00301	M62240	HNC12		EST00301	M62240	HNC12
51	EST00058	M61968	HFA36	114	EST00116	M62060	HNC69	178	EST00302	M62241	HNC13		EST00302	M62241	HNC13		EST00302	M62241	HNC13
52	EST00059	M61968	HFA36	115	EST00117	M62061	HNC70	179	EST00303	M62242	HNC14		EST00303	M62242	HNC14		EST00303	M62242	HNC14
53	EST00060	M61968	HFA36	116	EST00118	M62062	HNC71	180	EST00304	M62243	HNC15		EST00304	M62243	HNC15		EST00304	M62243	HNC15
54	EST00061	M61968	HFA36	117	EST00119	M62063	HNC72	181	EST00305	M62244	HNC16		EST00305	M62244	HNC16		EST00305	M62244	HNC16
55	EST00062	M61968	HFA36	118	EST00120	M62064	HNC73		EST00306	M62245	HNC17		EST00306	M62245	HNC17		EST00306	M62245	HNC17
56	EST00063	M61968	HFA36	119	EST00121	M62065	HNC74		EST00307	M62246	HNC18		EST00307	M62246	HNC18		EST00307	M62246	HNC18
57	EST00064	M61968	HFA36	120	EST00122	M62066	HNC75		EST00308	M62247	HNC19		EST00308	M62247	HNC19		EST00308	M62247	HNC19
58	EST00065	M61968	HFA36	121	EST00123	M62067	HNC76		EST00309	M62248	HNC20		EST00309	M62248	HNC20		EST00309	M62248	HNC20
59	EST00066	M61968	HFA36	122	EST00124	M62068	HNC77		EST00310	M62249	HNC21		EST00310	M62249	HNC21		EST00310	M62249	HNC21
60	EST00067	M61968	HFA36	123	EST00125	M62069	HNC78		EST00311	M62250	HNC22		EST00311	M62250	HNC22		EST00311	M62250	HNC22
61	EST00068	M61968	HFA36	124	EST00126	M62070	HNC79		EST00312	M62251	HNC23		EST00312	M62251	HNC23		EST00312	M62251	HNC23
62	EST00069	M61968	HFA36	125	EST00127	M62071	HNC80		EST00313	M62252	HNC24		EST00313	M62252	HNC24		EST00313	M62252	HNC24
63	EST00070	M61968	HFA36	126	EST00128	M62072	HNC81		EST00314	M62253	HNC25		EST00314	M62253	HNC25		EST00314	M62253	HNC25

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differentiated tumor tissue that has metastasized to foreign bodily sites.

The entire contents of all references cited above are hereby incorporated by reference.

5 While the present invention has been described in some detail for purposes of clarity and understanding, one skilled in the art will appreciate that various changes in form and detail can be made without departing from the true scope of the invention.

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VII. Correlation of EST and Clone Identifiers

15 The EST sequences of the present invention are identified herein by SEQ ID NO, and are identified in the GenBank database by a different number, are identified in the inventors' lab (and upcoming publications) by EST number, and clones have been submitted to the American Type Culture Collection (Rockville, Maryland USA) under clone names. Table 12 cross references those different numbers for the ESTs from cDNA, SEQ ID NOS 1-2409.

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Certain Sequence ID NOS are excluded from some claims based on their homology to known non-human sequences (See Table 2).

range of amounts of polyacrylamide in a set of gels to resolve the entire molecular weight range of proteins to be detected in the sample. A size marker is run in parallel for purposes of estimating molecular weights of the constituent proteins. Sample size for analysis is a convenient volume of from 5-50 μ l, and containing from about 1 to 100 μ g protein. An aliquot of each of the resolved proteins is transferred by blotting to a nitrocellulose filter paper, a process that maintains the pattern of resolution. Multiple copies are prepared. The procedure, known as Western Blot Analysis, is well described in Davis, L. et al., (above) Section 19-3. One set of nitrocellulose blots is stained with Coomassie Blue dye to visualize the entire set of proteins for comparison with the antibody bound proteins. The remaining nitrocellulose filters are then incubated with a solution of one or more specific antisera to tissue specific proteins prepared as described in Example 26. In this procedure, as in procedure A above, appropriate positive and negative sample and reagent controls are run.

In either procedure A or B, a detectable label can be attached to the primary tissue antigen-primary antibody complex according to various strategies and permutations thereof. In a straightforward approach, the primary specific antibody can be labeled; alternatively, the unlabeled complex can be bound by a labeled secondary anti-IgG antibody. In other approaches, either the primary or secondary antibody is conjugated to a biotin molecule, which can, in a subsequent step, bind an avidin conjugated marker. According to yet another strategy, enzyme labeled or radioactive protein A, which has the property of binding to any IgG, is bound in a final step to either the primary or secondary antibody.

The visualization of tissue specific antigen binding at levels above those seen in control tissues to one or more tissue specific antibodies, prepared from the gene sequences identified from EST sequences, can identify tissues of unknown origin, for example, forensic samples, or

Treated sections are incubated in a humid chamber for 30 min at room temperature, rinsed, then washed in buffer for 30-45 min. Excess fluid is blotted away, and the marker developed.

5 If the tissue specific antibody was not labeled in the first incubation, it can be labeled at this time in a second antibody-antibody reaction, for example, by adding fluorescein- or enzyme-conjugated antibody against the immunoglobulin class of the antiserum-producing species, for
10 example, fluorescein labeled antibody to mouse IgG. Such labeled sera are commercially available.

15 The antigen found in the tissues by the above procedure can be quantified by measuring the intensity of color or fluorescence on the tissue section, and calibrating that signal using appropriate standards.

B. Identification of Tissue Specific Soluble Proteins

20 The visualization of tissue specific proteins and identification of unknown tissues from that procedure is carried out using the labeled antibody reagents and detection strategy as described for immunohistochemistry; however the sample is prepared according to an electrophoretic technique to distribute the proteins extracted from the tissue in an orderly array on the basis of molecular weight for detection.

25 A tissue sample is homogenized using a Virtis apparatus; cell suspensions are disrupted by Dounce homogenization or osmotic lysis, using detergents in either case as required to disrupt cell membranes, as is the practice in the art. Insoluble cell components such as nuclei, microsomes, and membrane fragments are removed by ultracentrifugation, and
30 the soluble protein-containing fraction concentrated if necessary and reserved for analysis.

35 A sample of the soluble protein solution is resolved into individual protein species by conventional SDS polyacrylamide electrophoresis as described, for example, by Davis, L. et al., Section 19-2 in: *Basic Methods in Molecular Biology* (P. Leder, ed), Elsevier, New York (1986), using a

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A. Immunohistochemical Techniques

Purified, high-titer antibodies, prepared as described above, are conjugated to a detectable marker, as described, for example, by Fudenberg, H., Chap. 26 in: **Basic & Clinical Immunology**, 3rd Ed. Lange, Los Altos, California (1980) or Rose, N. et al., Chap. 12 in: **Methods in Immunodiagnosis**, 2d Ed. John Wiley & Sons, New York (1980).

A fluorescent marker, either fluorescein or rhodamine, is preferred, but antibodies can also be labeled with an enzyme that supports a color producing reaction with a substrate, such as horseradish peroxidase. Markers can be added to tissue-bound antibody in a second step, as described below. Alternatively, the specific antitissue antibodies can be labeled with ferritin or other electron dense particles, and localization of the ferritin coupled antigen-antibody complexes achieved by means of an electron microscope. In yet another approach, the antibodies are radiolabeled, with, for example ^{125}I , and detected by overlaying the antibody treated preparation with photographic emulsion.

Preparations to carry out the procedures can comprise monoclonal or polyclonal antibodies to a single gene copy or protein, identified as specific to a tissue type, for example, brain tissue, or antibody preparations to several antigenically distinct tissue specific antigens can be used in panels, independently or in mixtures, as required.

Tissue sections and cell suspensions are prepared for immunohistochemical examination according to common histological techniques. Multiple cryostat sections (about 4 μm , unfixed) of the unknown tissue and known control, are mounted and each slide covered with different dilutions of the antibody preparation. Sections of known and unknown tissues should also be treated with preparations to provide a positive control, a negative control, for example, pre-immune sera, and a control for non-specific staining, for example, buffer.

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determined by preparing competitive binding curves, as described, for example, by Fisher, D., Chap. 42 in: **Manual of Clinical Immunology**, 2d Ed. (Rose and Friedman, eds.) Amer. Soc. For Microbiol., Washington, D.C. (1980).

5 Antibody preparations prepared according to either protocol are useful in quantitative immunoassays which determine concentrations of antigen-bearing substances in biological samples; they are also used semi-quantitatively or qualitatively to identify the presence of antigen in a
10 biological sample.

EXAMPLE 27

Identification of Tissue Types or Cell Species by Means of Labeled Tissue Specific Antibodies

15 Identification of specific tissues is accomplished by the visualization of tissue specific antigens by means of antibody preparations according to Example 26 which are conjugated, directly or indirectly to a detectable marker.
20 Selected labeled antibody species bind to their specific antigen binding partner in tissue sections, cell suspensions, or in extracts of soluble proteins from a tissue sample to provide a pattern for qualitative or semi-qualitative interpretation.

25 Antisera for these procedures must have a potency exceeding that of the native preparation, and for that reason, antibodies are concentrated to a mg/ml level by isolation of the gamma globulin fraction, for example, by ion-exchange chromatography or by ammonium sulfate
30 fractionation. Also, to provide the most specific antisera, unwanted antibodies, for example to common proteins, must be removed from the gamma globulin fraction, for example by means of insoluble immunoabsorbents, before the antibodies are labeled with the marker. Either monoclonal or
35 heterologous antisera is suitable for either procedure.

microtiter plate where growth of the culture is continued. Antibody-producing clones are identified by detection of antibody in the supernatant fluid of the wells by immunoassay procedures, such as Elisa, as originally described by Engvall, E., *Meth. Enzymol.* 70:419 (1980), and derivative methods thereof. Selected positive clones can be expanded and their monoclonal antibody product harvested for use. Detailed procedures for monoclonal antibody production are described in Davis, L. et al. **Basic Methods in Molecular Biology** Elsevier, New York. Section 21-2.

B. Polyclonal Antibody Production by Immunization

Polyclonal antiserum containing antibodies to heterogenous epitopes of a single protein can be prepared by immunizing suitable animals with the expressed protein described above, which can be unmodified or modified to enhance immunogenicity. Effective polyclonal antibody production is affected by many factors related both to the antigen and the host species. For example, small molecules tend to be less immunogenic than other and may require the use of carriers and adjuvant. Also, host animals vary in response to site of inoculations and dose, with both inadequate or excessive doses of antigen resulting in low titer antisera. Small doses (ng level) of antigen administered at multiple intradermal sites appears to be most reliable. An effective immunization protocol for rabbits can be found in Vaitukaitis, J. et al. *J. Clin. Endocrinol. Metab.* 33:988-991 (1971).

Booster injections can be given at regular intervals, and antiserum harvested when antibody titer thereof, as determined semi-quantitatively, for example, by double immunodiffusion in agar against known concentrations of the antigen, begins to fall. See, for example, Ouchterlony, O. et al., Chap. 19 in: **Handbook of Experimental Immunology** D. Wier (ed) Blackwell (1973). Plateau concentration of antibody is usually in the range of 0.1 to 0.2 mg/ml of serum (about 12 μ M). Affinity of the antisera for the antigen is

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and the polyadenylation signal incorporated into the construct increases the level of expression. These techniques as described are well known to those skilled in the art of molecular biology. Standard methods are published in methods texts such as Davis et al. and many of the methods are available from the technical assistance representatives from Stratagene, Life Technologies, Inc., or Promega. Polypeptide may additionally be produced from either construct using in vitro translation systems such as In vitro Express™ Translation Kit (Stratagene).

Example 26

Production of an Antibody to a Human Protein

Substantially pure protein or polypeptide is isolated from the transfected or transformed cells as described in Example 25. Concentration of protein in the final preparation is adjusted, for example, by concentration on an Amicon filter device, to the level of a few micrograms/ml. Monoclonal or polyclonal antibody to the protein can then be prepared as follows:

A. Monoclonal Antibody Production by Hybridoma Fusion

Monoclonal antibody to epitopes of any of the peptides identified and isolated as described can be prepared from murine hybridomas according to the classical method of Kohler, G. and Milstein, C., *Nature* 256:495 (1975) or derivative methods thereof. Briefly, a mouse is repetitively inoculated with a few micrograms of the selected protein over a period of a few weeks. The mouse is then sacrificed, and the antibody producing cells of the spleen isolated. The spleen cells are fused by means of polyethylene glycol with mouse myeloma cells, and the excess unfused cells destroyed by growth of the system on selective media comprising aminopterin (HAT media). The successfully fused cells are diluted and aliquots of the dilution placed in wells of a

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includes the Herpes Simplex Thymidine Kinase promoter and the selectable neomycin gene. The cDNA is obtained by PCR from the bacterial vector using oligonucleotide primers complementary to the cDNA and containing restriction endonuclease sequences for Pst I incorporated into the 5' primer and BglII at the 5' end of the corresponding cDNA 3' primer, taking care to ensure that the cDNA is positioned inframe with the poly A sequence. The purified fragment obtained from the resulting PCR reaction is digested with PstI, blunt ended with an exonuclease, digested with Bgl II, purified and ligated to pXT1, now containing a poly A sequence and digested BglII.

The ligated product is transfected into mouse NIH 3T3 cells using Lipofectin (Life Technologies, Inc., Grand Island, New York) under conditions outlined in the product specification. Positive transfectants are selected after growing the transfected cells in 600ug/ml G418 (Sigma, St. Louis, Missouri). The protein is preferably released into the supernatant. However if the protein has membrane binding domains, the protein may additionally be retained within the cell or expression may be restricted to the cell surface.

Since it may be necessary to purify and locate the transfected product, synthetic 15-mer peptides synthesized from the predicted cDNA sequence are injected into mice to generate antibody to the polypeptide encoded by the cDNA.

If antibody production is not possible, the cDNA sequence is additionally incorporated into eukaryotic expression vectors and expressed as a chimeric with, for example, β -globin. Antibody to β -globin is used to purify the chimeric. Corresponding protease cleavage sites engineered between the β -globin gene and the cDNA are then used to separate the two polypeptide fragments from one another after translation. One useful expression vector for generating β -globin chimerics is pSG5 (Stratagene). This vector encodes rabbit β -globin. Intron II of the rabbit β -globin gene facilitates splicing of the expressed transcript,

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with a particular function. The cell functions can also be predicted based on the presence of abnormal physiologies within cells derived from individuals with a particular inherited disease, particularly when the EST is associated with the disease using techniques described in Example 22.

EXAMPLE 25

Gene expression from DNA Sequences Corresponding to ESTs

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A gene sequence of the present invention coding for all or part of a human gene product is introduced into an expression vector using conventional technology. (Techniques to transfer cloned sequences into expression vectors that direct protein translation in mammalian, yeast, insect or bacterial expression systems are well known in the art.) Commercially available vectors and expression systems are available from a variety of suppliers including Stratagene (La Jolla, California), Promega (Madison, Wisconsin), and Invitrogen (San Diego, California). If desired, to enhance expression and facilitate proper protein folding, the codon context and codon pairing of the sequence may be optimized for the particular expression organism, as explained by Hatfield, et al., U.S. Patent No. 5,082,767, incorporated herein by this reference.

The following is provided as one exemplary method to generate polypeptide from cloned cDNA sequences. The cDNA from the EST of interest is sequenced to identify the methionine initiation codon for the gene and the poly A sequence. If the cDNA lacks a poly A sequence, this sequence can be added to the construct by, for example, splicing out the Poly A sequence from pSG5 (Stratagene) using BglI and SalI restriction endonuclease enzymes and incorporating it into the mammalian expression vector pXT1 (Stratagene). pXT1 contains the LTRs and a portion of the gag gene from Moloney Murine Leukemia Virus. The position of the LTRs in the construct allow efficient stable transfection. The vector

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expression in individuals having diseases associated with a particular gene. Similarly, a portion of the EST or corresponding gene sequence can be used to study the effect of inhibiting transcription of a particular gene within a cell. Traditionally, homopurine sequences were considered the most useful. However, homopyrimidine sequences can also inhibit gene expression. Thus, both types of sequences from either the EST or from the gene corresponding to the EST are contemplated within the scope of this invention. Homopyrimidine oligonucleotides bind to the major groove at homopurine:homopyrimidine sequences. As an example, 10-mer to 20-mer homopyrimidine sequences from the ESTs can be used to inhibit expression from homopurine sequences. SEQ ID NOS such as 282, 888, 719, 670, 994, 240, 873 and 761 contain homopyrimidine 15-mers. Moreover the natural (beta) anomers of the oligonucleotide units can be replaced with alpha anomers to render the oligonucleotide more resistant to nucleases. Further, an intercalating agent such as ethidium bromide, or the like, can be attached to the 3' end of the alpha oligonucleotide to stabilize the triple helix. For information on the generation of oligonucleotides suitable for triple helix formation see Griffin et al. (*Science* 245:967-971 (1989), which is hereby incorporated by this reference).

The oligonucleotides may be prepared on an oligonucleotide synthesizer or they may be purchased commercially from a company specializing in custom oligonucleotide synthesis. The sequences are introduced into cells in culture using techniques known in the art that include but are not limited to calcium phosphate precipitation, DEAE-Dextran, electroporation, liposome-mediated transfection or native uptake. Treated cells are monitored for altered cell function. These cell functions are predicted based upon the homologies of the gene, corresponding to the EST from which the oligonucleotide was derived, with known genes sequences that have been associated

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procedures known in the art. The molecules are introduced onto cell samples at a number of different concentrations preferably between $1 \times 10^{-10} \text{M}$ to $1 \times 10^{-4} \text{M}$. Once the minimum concentration that can adequately control translation is identified, the optimized dose is translated into a dosage suitable for use in vivo. For example, an inhibiting concentration in culture of 1×10^{-7} translates into a dose of approximately 0.6 mg/kg bodyweight. Levels of oligonucleotide approaching 100 mg/kg bodyweight or higher may be possible after testing the toxicity of the oligonucleotide in laboratory animals.

The antisense can be introduced into the body as a bare or naked oligonucleotide, oligonucleotide encapsulated in lipid, oligonucleotide sequence encapsidated by viral protein, or as oligonucleotide contained in an expression vector such as those described in Example 25. The antisense oligonucleotide is preferably introduced into the vertebrate by injection. It is additionally contemplated that cells from the vertebrate are removed, treated with the antisense oligonucleotide, and reintroduced into the vertebrate. It is further contemplated that the antisense oligonucleotide sequence is incorporated into a ribozyme sequence to enable the antisense to bind and cleave its target. For technical applications of ribozyme and antisense oligonucleotides see Rossi et al.

EXAMPLE 24

Preparation and use of Triple Helix Probes

Triple helix oligonucleotides are used to inhibit transcription from a genome. They are particularly useful for studying alterations in cell activity as it is associated with a particular gene. The EST sequences or complete sequences of the present invention or, more preferably, a portion of those sequences, can be used to inhibit gene

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protein subunit from patients with Angelman's disease (Am. J. Hum. Genet. 49:330-337, (1991)). It is likely that other genes will additionally be associated with the disease.

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EXAMPLE 23**Preparation and Use of Antisense Oligonucleotides**

Antisense RNA molecules are known to be useful for
10 regulating translation within the cell. Antisense RNA
molecules can be produced from EST sequences or from the
corresponding gene sequences. These antisense molecules can
be used as diagnostic probes to determine whether or not a
particular gene is expressed in a cell. Similarly, the
15 antisense molecules can be used as a therapeutic to regulate
gene expression once the EST is associated with a particular
disease (see Example 22).

The antisense molecules are obtained from a nucleotide
sequence by reversing the orientation of the coding region
20 with regard to the promoter. Thus, the antisense RNA is
complementary to the corresponding mRNA. For a review of
antisense design see Green et al., Ann. Rev. Biochem. 55:569-
597 (1986), which is hereby incorporated by reference. The
antisense sequences can contain modified sugar phosphate
25 backbones to increase stability and make them less sensitive
to RNase activity. Examples of the modifications are
described by Rossi et al., Pharmacol. Ther. 50(2):245-254,
(1991).

Antisense molecules are introduced into cells that
30 express the gene corresponding to the EST of interest in
culture. In a preferred application of this invention, the
polypeptide encoded by the gene is first identified, so that
the effectiveness of antisense inhibition on translation can
be monitored using techniques that include but are not
35 limited to antibody-mediated tests such as RIAs and ELISA,
functional assays, or radiolabelling. The antisense molecule
is introduced into the cells by diffusion or by transfection

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from normal patients is essential for providing gene or other therapies for AD patients.

Genetic diseases are not always accompanied by gene deletions. Therefore, it is also important to use the ESTs that bind to bands 15q11q13 from AD patients as tools to identify the polymorphisms present within the disease population. Restriction fragment length polymorphism (RFLP) analysis can be performed on patient cells from AD disease or from somatic cell hybrids created using the long arm of chromosome 15. For a review of RFLP techniques see Donis-Keller et al. (Cell 51:319-337 (1987) hereby incorporated by reference). DNA is isolated from the somatic cell lines or from cells from AD patients. The DNA is digested with one or more restriction enzymes according to techniques of Donis-Keller et al. The resulting fragments are separated by gel electrophoresis, denatured, transferred to nitrocellulose and hybridized with the selected radio-labeled ESTs that localize to the region of interest. The autoradiographic pattern is compared both to a number of AD patients and to normal patients. Common patterns of EST hybridization in AD patients that are not present in normal patients indicates that the genes associated with these ESTs are candidate genes affected by AD.

cDNA libraries are prepared from the somatic cell hybrids from AD patients. Libraries are prepared using Lambda Zap II Library Kits (Stratagene, La Jolla, California) or other commercially available library kits. The ESTs of interest are used as probes to identify those bacterial colonies carrying genes corresponding to the EST probes. Positive clones are sequenced and the sequences are compared to homologous gene sequences derived from normal patients.

Alterations, including deletions and substitutions, within gene sequences, associated with bands 15q11q13, are thus positively identified and associated with AD disease. Wagstaff et al. were able to identify deletions and substitutions in sequences encoding the GABA_A receptor

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EXAMPLE 22

Identification of a gene associated with
Angelman's disease

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Angelman's disease (AD) is characterized by deletions on the long arm of chromosome 15 (15q11q13) (Williams et al. Am. J. Med. Genet. 32:339-345 (1989) hereby incorporated by reference). The symptoms of the disease include developmental delay, seizures, inappropriate laughter and ataxic movements. These symptoms suggest that the disorder is a neurologic deficiency. This prophetic example illustrates how ESTs, preferably obtained from a cDNA library from human brain, may be used in identifying the defective gene or genes associated with Angelman's Disease. (The example is based on analogous work with genomic DNA, rather than cDNA and ESTs, in identifying the genetic defect associated with Angelman's Disease.) This example also illustrates how EST sequences may generally be used for identifying gene sequences associated with an inherited disease that is mapped to a chromosome location.

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ESTs are screened using techniques described in Example 5 and Example 7 to identify those ESTs that localize to the long arm of chromosome 15 and preferably localize to chromosome 15 bands 15q11q13 from normal patients. ESTs that bind to the long arm of chromosome 15 are hybridized to chromosome 15 from AD patients. These studies are preferably performed using either fluorescence in situ hybridization or using somatic cell hybrids that contain fragments from the long arm of chromosome 15 from AD patients. Those chromosome 15-specific ESTs that do not map to chromosome 15 from AD patients are useful as markers for Angelman's Disease and can be incorporated into diagnostics for genetic screening. These ESTs are associated with chromosome deletions present in Angelman's disease. Identification of the gene associated with these AD negative ESTs and an analysis of the polypeptides encoded by the genes

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and separated on 0.8% agarose gels. The gels are transferred using Southern blotting techniques onto nitrocellulose.

10 ng of each of the oligos are pooled and end-labeled with P^{32} . The nitrocellulose is prehybridized with blocking solution and hybridized with the labeled probes. Following hybridization and washing, the nitrocellulose filter is exposed to X-Omat AR X-ray film. The resulting hybridization pattern will be unique for each individual.

It is additionally contemplated within this example that the representative number of EST sequences can be varied for additional accuracy or clarity.

EXAMPLE 21

Identification of genes associated with hereditary diseases

This example illustrates an approach useful for the association of EST sequences with particular phenotypic characteristics. In this example, a particular EST is used as a test probe to associate that EST with a particular phenotypic characteristic.

An EST clone corresponding to EST01643, (SEQ ID NO 1894) maps to a gene rich region of chromosome 6. EST clone HHCMH89, from which EST01643 was derived, was mapped to chromosome 6p21 by Dr. Julie Korenberg of UCLA/Cedar Sinai Hospital using FISH. A search of Mendelian Inheritance in Man (supra) revealed 6p21 to be a very gene rich region containing several known genes and several diseases for which genes have not been identified. The cDNA encoded by EST clone HHCMH89 thus becomes an immediate candidate for each of these genetic diseases.

Cells from patients with these diseases are isolated and expanded in culture. PCR primers from the EST sequences are used to screen genomic DNA and RNA or cDNA from the patients. ESTs that are not amplified in the patients can be positively associated with a particular disease by further analysis.

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NOS provided in Table 7 onto nitrocellulose or the like using a vacuum dot blot manifold (BioRad, Richmond California). The nitrocellulose filter containing the EST clone sequences is baked or UV linked to the filter, prehybridized and hybridized with labeled probe using techniques known in the art (Davis et al. supra). The ^{32}P labeled DNA fragments are sequentially hybridized with successively stringent conditions to detect minimal differences between the 30 bp sequence and the DNA. Tetramethylammonium chloride is useful for identifying clones containing small numbers of nucleotide mismatches (Wood et al., Proc. Natl. Acad. Sci. USA 82(6):1585-1588 (1985) which is hereby incorporated by reference. A unique pattern of dots distinguishes one individual from another individuals.

EXAMPLE 20

Alternative "Fingerprint" Identification Technique

EST sequences and the corresponding complete cDNA sequences can be used to create a unique fingerprint for an individual. Thus pools of EST sequences can be used in forensics, paternity suits or the like to differentiate one individual from another.

Entire EST sequences can be used; similarly oligonucleotides can be prepared from EST sequences. In this example, 20-mer oligonucleotides are prepared from 200 EST sequences using commercially available oligonucleotide services such as Oligos Etc., Wilsonville, OR. Patient cell samples are processed for DNA using techniques well known to those with skill in the art. The nucleic acid is digested with restriction enzymes EcoRI and XbaI. Following digestion, samples are applied to wells for electrophoresis. The procedure, as known in the art, may be modified to accommodate polyacrylamide electrophoresis, however in this example, samples containing 5 ug of DNA are loaded into wells

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blotting see Davis et al. (Basic Methods in Molecular Biology, 1986, Elsevier Press. pp 62-65).

A panel of ESTs or complete cDNA sequences from Examples 1, 2, and/or 13, or fragments thereof of at least 15 bases, are radioactively or colorimetrically labeled using end-labeled oligonucleotides derived from the ESTs, nick translated sequences or the like using methods known in the art and hybridized to the Southern blot using techniques known in the art (Davis et al., supra). Preferably, at least 5 to 10 of these labeled probes are used, and more preferably at least about 20 or 30 are used to provide a unique pattern. The resultant bands appearing from the hybridization of a large sample of ESTs will be a unique identifier. Since the restriction enzyme cleavage will be different for every individual, the band pattern on the Southern blot will also be unique. Increasing the number of EST probes will provide a statistically higher level of confidence in the identification since there will be an increased number of sets of bands used for identification.

EXAMPLE 19

Dot Blot Identification Procedure

Another technique for identifying individuals using the sequences disclosed herein utilizes a dot blot hybridization technique.

Genomic DNA is isolated from nuclei of subject to be identified. Oligonucleotide probes of approximately 30 bp in length were synthesized that correspond to sequences from the ESTs. The probes are used to hybridize to the genomic DNA through conditions known to those in the art. The oligonucleotides are end labelled with P^{32} using polynucleotide kinase (Pharmacia). Dot Blots are created by spotting about 50 ng cDNA of at least 10, preferably at least 50 sequences corresponding to a variety of the Sequence ID

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of 100 bases in length are used to prove identity between the suspect and the sample.

EXAMPLE 17

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Positive Identification by DNA Sequencing

The technique outlined in the previous example may also be used on a larger scale to provide a unique fingerprint-type identification of any individual. In this technique, primers are prepared from a large number of sequences from Examples 1, 2, 11, 12 and/or 13. Preferably, 20 to 50 different primers are used. These primers are used to obtain a corresponding number of PCR-generated DNA segments from the individual in question in accordance with Example 15. Each of these DNA segments is sequenced, using the methods set forth in Example 1. The database of sequences generated through this procedure uniquely identifies the individual from whom the sequences were obtained. The same panel of primers may then be used at any later time to absolutely correlate tissue or other biological specimen with that individual.

EXAMPLE 18

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Southern Blot Forensic Identification

The procedure of Example 17 is repeated to obtain a panel of from 10 to 2000 amplified sequences from an individual and a specimen. This PCR-generated DNA is then digested with one or a combination of, preferably, four base specific restriction enzymes. Such enzymes are commercially available and known to those of skill in the art. After digestion, the resultant gene fragments are size separated in multiple duplicate wells on an agarose gel and transferred to nitrocellulose using Southern blotting techniques well known to those with skill in the art. For a review of Southern

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present invention, to prepare PCR primers for a variety of applications. The PCR primers are preferably at least 15 bases, and more preferably at least 18 bases in length. The procedure of Example 5 is repeated using the desired EST, or using the corresponding cDNA or genomic DNA sequence from Example 13. It is preferred that the primer pairs have approximately the same G/C ratio, so that melting temperatures are approximately the same. When screening cDNA, introns are of no concern; however, when screening genomic DNA, primers should be selected to avoid reading across introns, which usually are too large to amplify. The PCR primers and amplified DNA of this Example find use in the Examples that follow.

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EXAMPLE 16**Forensic Matching by DNA Sequencing**

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In one exemplary method, DNA samples are isolated from forensic specimens of, for example, hair, semen, blood or skin cells by conventional methods. A panel of PCR primers derived from a number of the sequences of Example 1, 2, 11, 12 and/or 13 is then utilized in accordance with Example 12 to obtain DNA of approximately 100-200 bases in length from the forensic specimen. Corresponding sequences are obtained from a suspect. Each of these identification DNAs is then sequenced, and a simple database comparison determines the differences, if any, between the sequences from the suspect and those from the sample. Statistically significant differences between the suspect's DNA sequences and those from the sample conclusively prove a lack of identity. This lack of identity can be proven, for example, with only one sequence. Identity, on the other hand, should be demonstrated with a large number of sequences, all matching. Preferably, a minimum of 50 statistically identical sequences

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software from Applied Biosystems, Inc. (Foster City, CA). In this way, the complete insert from these four cDNA clones was sequenced on both strands to an average redundancy between three and four (each base was sequenced between three and four times, on average). Those complete insert sequences are disclosed herein as SEQ ID 2418, 2419, 2420, and 2421, corresponding to original ESTs with SEQ ID 223, 189, 227, and 188, respectively.

EXAMPLE 14

Determining Reading Frame, Orientation, Coding Regions: ESTs and Complete cDNA Sequences

Once the complete cDNA sequence has been determined in accordance with Example 13, the reading frame, orientation, and coding regions are determined by computer techniques. (The complete coding region is considered to be the largest open reading frame from a methionine to a stop codon.)

Specifically, the CRM program on the GMAIL server is used as explained in Example 9 to determine probable coding regions. This information is supplemented by location of start and stop codons. Where possible, the results of the CRM analysis are validated by comparison of the cDNA sequence to known sequences using database matching, in accordance with Examples 3 and 4. If a match of 50% (or even less) is found in any particular reading frame and orientation, this serves to verify corresponding CRM results. Alternatively, database matches can be used to determine reading frame and orientation without use of the CRM program. Of course, if the cDNA is derived from a directional library, the probable orientation is already known.

EXAMPLE 15

Preparation of PCR Primers and Amplification of DNA

The EST sequences and the corresponding cDNA sequences and genomic sequences may be used, in accordance with the

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sequence was confirmed by sequencing PCR products. SEQ ID NO 2410, includes a partial exon of one of these genes.

EXAMPLE 13

5 Complete Sequence of EST Clone Inserts

There are a number of methods known to those with skill in the art of molecular biology, to obtain sequence information from the cDNAs corresponding to the EST sequences. Procedures for these methods are provided in Basic Methods in Molecular Biology (David et al. *supra*). One way to acquire more information about the cDNA from which an EST was derived is to sequence the remainder of the cDNA clone. The complete sequence of the inserts of four EST clones (representing SEQ ID NOs 188, 189, 223, and 227) was determined using Exonuclease III deletions. Briefly, EST clones were digested with the restriction enzymes SalI and KpnI or PstI and BamHI (for deletions from the Forward primer and Reverse primer ends of the insert, respectively). The KpnI and PstI enzymes leave 3' sticky ends following digestion, which Exonuclease III is unable to bind. This results in unidirectional deletions into the cDNA insert leaving the vector sequence undisturbed. After addition of Exonuclease III to the Forward and Reverse deletion reactions, aliquots of the reaction were removed at defined time intervals and the reaction was stopped to prevent further deletion. S1 nuclease and Klenow DNA polymerase were added to create blunt ended fragments suitable for ligation.

Samples for each time point was purified by electrophoresis through an agarose gel and religated. Two to four representative clones from each time point in each direction were sequenced to give between 200 and 400 base pairs of sequence data. Careful selection of deletion conditions and time points allow a deletion series of approximately 100-200 base pairs difference in length at each consecutive time point. Sequence fragments were reassembled into a redundant contiguous sequence using the INHERIT

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When multiple cosmids or YAC clones were used as the source DNA, a pool of specific expressed exons was obtained as a cDNA library. The EST/cDNAs sequenced from this specific library are disclosed herein as SEQ ID NOS: 2412-2417.

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EXAMPLE 12**PCR Amplification from Predicted Exons**

10 Computational analyses can be applied to genomic DNA sequences to predict protein coding regions. The coding region prediction program CRM (E. Uberbacher and R. Mural, Proc. Natl. Acad. Sci. USA 88:11261-5 (1991)) finds open reading frames and classifies them according to their
15 probability of being coding regions. These regions are subsequently examined using the GM program (C. Fields and C. Soderlund, Comp. Applic. Biosci. 6: 263, 1990), which predicts intron-exon structure. PCR primers are then designed to amplify the predicted exons and used to test
20 human cDNA libraries (for example, fetal brain or placental libraries) for the presence of these putative exons using a PCR assay.

This strategy has been successfully applied in two large scale genomic sequencing projects, the Huntington's locus of
25 human chromosome 4p16.3 (McCombie, et al., submitted) and human chromosome locus 19q13.3 (Martin-Gallardo, et al., submitted). Sequences from eleven predicted exons from chromosome 4 were present in tested cDNA libraries, indicating that this region has at least two and probably
30 three expressed genes. In one case, the method resulted in an amplification product which spanned two predicted exons. (SEQ ID NO: 2411.) When sequenced, this PCR product indicated the presence of the two exons from which the
primers were initially chosen, as well as an intervening exon
35 which was also predicted by the CRM program, but not the intervening genomic sequences. In a similar fashion, the presence of the two predicted genes in the chromosome 19

EXAMPLE 11

cDNA Libraries Generated From Specific Genomic DNA
by Exon Expression & Amplification

5

Exon amplification was used to express potential exons from genomic DNA in a recombinant vector that contains some of the signals necessary for splicing. If an exon is present in the proper orientation in the vector, that exon will be spliced in a mammalian cell and will become part of the mRNA of that cell. The exon splice-product can be purified from other mRNA in the cell by conversion of the mRNA to cDNA and selective amplification of the recombinant splice-product cDNAs. Cosmid DNA from human chromosome 19q13.3 was digested with BamHI or BamHI/BglIII restriction enzymes. The fragments generated were collected and size specifically cloned into an expression vector (Buckler, et al. Proc. Nat'l. Acad. Sci. USA, 88:4005-4009 (1991)). After transfection by electroporation of these constructs into COS cells, RNA transcripts were generated using the SV40 early promoter and a polyadenylation signal derived from SV40 both present in the expression vector. When a fragment of genomic DNA contains an entire exon with flanking intron sequence in the sense orientation, the exon should be retained in the mature poly(A)+ cytoplasmic RNA. Therefore, the mRNA was used as template for cDNA synthesis using reverse transcriptase and vector-priming. Subsequently, the cDNAs were amplified by vector-priming using PCR. A fraction of this first PCR product was reamplified using internal vector-primers containing terminal cloning sites. These products were end-repaired with T4 DNA polymerase, digested with the appropriate restriction enzymes, gel purified and cloned into pBluescript vectors. The constructs were transfected into XL1-Blue competent cells and plated on LB/X-gal/IPTG/ampicillin plates. White colonies were selected and expanded to prepare DNA templates as described in Example 2.

35

<u>SEQ ID</u>	<u>EST#</u>	<u>Group</u>	<u>Putative Identification</u>
2092	EST01700	TP	Anion exchanger homolog AE3
1956	EST01663	TP	Ca ²⁺ -transporting ATPase 2
1039	EST02055	TP	Calcium channel
1667	EST00825	TP	Gamma-aminobutyric acid transporter
1412	EST02446	TP	Glutamate-aspartate carrier protein
913	EST01913	TT	Clathrin coat assembly protein AP50 homolog
1035	EST02051	TT	J1 protein
93	EST00287	TT	Processing enhancing protein
38	EST00374	TT	RNA polymerase II 6th subunit (RPO26)
1715	EST01583	TT	Ribosomal protein L18a
1856	EST01627	TT	Ribosomal protein L1a
1974	EST01667	TT	Ribosomal protein L3
301	EST00300	TT	Ribosomal protein L30
22	EST00301	TT	Ribosomal protein S10
2402	EST01826	TT	Ribosomal protein S10
463	EST01459	TT	Ribosomal protein YL10
2121	EST01711	TT	Valine-tRNA ligase
1332	EST02362	TX	GA binding protein, beta subunit
1229	EST02258	TX	KUP protein
1395	EST02429	TX	Nuclear factor 1-like protein (NF1)
187	EST00152	TX	Wilm's tumor-related protein
249	EST00275	TX	Zinc Finger Proteins
413	EST01446	TX	Zinc Finger Proteins
469	EST01460	TX	Zinc Finger Proteins
833	EST01560	TX	Zinc Finger Proteins
1230	EST02259	TX	Zinc finger proteins
1496	EST02534	TX	Zinc finger proteins
2324	EST01352	TX	Zinc Finger Proteins

Group Key: CS: Cell Surface, DC: Developmental Control, EM: Energy Metabolism, KP: Kinases and Phosphatases, OG: Oncogenes, OM: Other Metabolism, PI, Peptidases and Peptidase Inhibitors, RT: Receptors, SC: Structural and Cytoskeletal, ST: Signal Transduction, TP: Transporters, TT: Transcription, Translation, and Subcellular Localization, TX: Transcription Factors.

<u>SEQ ID</u>	<u>EST#</u>	<u>Group</u>	<u>Putative Identification</u>
2254	EST01751	OM	Phosphatidylinositol-4,5-bisphosphate phosphodiesterase
1654	EST01572	OM	Protochlorophyllide reductase
2073	EST01697	OM	Succinate dehydrogenase flavoprotein
2138	EST01715	OM	Succinate dehydrogenase flavoprotein
1771	EST01601	OM	Thiosulfate sulfurtransferase (rhodanese)
2173	EST01724	PI	Lon protease
2297	EST01775	PI	Prohormone cleavage enzyme
9	EST00376	PI	Prolyl endopeptidase
1726	EST01588	PI	XPR2 alkaline extracellular protease
1147	EST02169	PP	Tyrosine kinase
2282	EST01764	RT	Lamin B receptor
189	EST00282	RT	trkB
251	EST00370	SC	Actin, other
2146	EST01218	SC	Actin, other
248	EST00271	SC	Actinin, alpha
891	EST01891	SC	Actinin, alpha
1500	EST02538	SC	Actinin, alpha
132	EST00110	SC	Agrin
1852	EST01625	SC	Agrin
2004	EST01676	SC	Cofilin
650	EST00642	SC	Dilute (myosin heavy chain)
2217	EST01738	SC	Gelation factor ABP-280
77	EST00257	SC	Kinesin
78	EST00258	SC	Kinesin
2245	EST01748	SC	Kinesin
1468	EST02505	SC	Matrin 3
223	EST00368	SC	Microtubule-associated protein 1B
824	EST01865	SC	Microtubule-associated protein 1B
2032	EST01683	SC	Microtubule-associated protein 1B
506	EST01471	SC	Neuraxin
951	EST01960	SC	Spectrin, beta
1371	EST02402	SC	Talin
653	EST01512	SC	Tubulin, alpha
311	EST00270	SC	Tubulin, beta
594	EST01490	SC	Tubulin, beta
757	EST01542	SC	Tubulin, beta
1245	EST02274	SC	Tubulin, beta
1589	EST02634	SC	Tubulin, beta
1701	EST00853	SC	Unc-104
969	EST01982	ST	ADP-ribosylation factor 1
1126	EST02146	ST	Calbindin D28
1910	EST01645	ST	Calmodulin
161	EST00247	ST	MARCKS (myristoylated alanine-rich protein kinase)
769	EST00734	ST	MARCKS homolog
1386	EST02418	ST	MARCKS homolog
1931	EST01041	ST	cAMP-regulated phosphoprotein
1413	EST02447	ST	cAMP-specific phosphodiesterase
299	EST00249	ST	smg p25A GDP dissociation inhibitor

Table 11: Thirteen-Class Functional Groupings of ESTs

<u>SEO ID</u>	<u>EST#</u>	<u>Group</u>	<u>Putative Identification</u>
208	EST00250	CS	60K filarial antigen
2320	EST01784	CS	60K filarial antigen
1965	EST01664	CS	Amyloid A4
2068	EST01694	CS	Amyloid A4
2408	EST00244	CS	Amyloid A4
1880	EST01634	CS	Axonal glycoprotein TAG-1
1885	EST01639	CS	Histocompatibility antigen modifier 1
313	EST00276	CS	Lysosomal membrane glycoprotein 1 (LAMP-1)
2017	EST01678	CS	Milk fat globule membrane protein
1567	EST02610	CS	Neural cell adhesion molecule L1
2368	EST01389	CS	Radial spoke protein 3
2089	EST01699	CS	Sperm membrane protein
1277	EST02306	DC	Bib protein
188	EST00256	DC	Enhancer of split
43	EST00371	DC	Maternal G10 protein
1704	EST01580	DC	Myeloid differentiation primary response gene MyD1
227	EST00259	DC	Notch/Xotch
952	EST01961	DC	Notch/Xotch
346	EST01828	DC	Orthodentical homeotic protein
1408	EST02442	DC	Seven in absentia
97	EST00289	EM	Aconitase
310	EST00377	EM	Fo ATPase beta subunit, mitochondrial
485	EST01466	KP	Calmodulin-dependent protein kinase, type II, beta
993	EST02007	KP	Kinase 5 protein
1069	EST02087	KP	Protein kinase C, zeta
1933	EST01650	KP	Protein phosphatase 2A beta subunit
202	EST00298	KP	Protein-tyrosine phosphatase LRP
1348	EST02378	KP	cAMP-dependent protein kinase inhibitor
2302	EST01779	OG	Discs-large tumor suppressor
2353	EST01806	OG	Prohibitin
1478	EST02515	OG	Rab5
300	EST00232	OG	Transforming protein (db1)
37	EST00038	OG	ras p21-like small GTP-binding protein (smg GDS)
102	EST00248	OG	rho H12/ ARH12
1834	EST01620	OM	AMP deaminase, brain
691	EST00675	OM	Alcohol dehydrogenase
396	EST01443	OM	CDPdiacylglycerol-serine O-phosphatidyltransferase
2192	EST01257	OM	Diacylglycerol kinase, lymphocyte
1441	EST02477	OM	Diamine acetyltransferase
2289	EST01325	OM	Fatty acid synthase
1020	EST02034	OM	Glutaminase
2326	EST01791	OM	Inositol-1,4,5-trisphosphate 3-kinase
1427	EST02463	OM	Long-chain-fatty-acid-CoA ligase
2226	EST01744	OM	NAD(P)+ transhydrogenase (B-specific)
1566	EST02609	OM	Neutrophil oxidase factor
1681	EST01573	OM	Nucleoside diphosphate kinase

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1371	EST02402	S	Talin
1701	EST00853	S	Unc-104

Group Key: M: Metabolic, R: Regulatory, S: Structural

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202	EST00298	R	Protein-tyrosine phosphatase LRP
1478	EST02515	R	Rab5
1408	EST02442	R	Seven in absentia
300	EST00232	R	Transforming protein (dbl)
1147	EST02169	R	Tyrosine kinase
1348	EST02378	R	cAMP-dependent protein kinase inhibitor
1931	EST01041	R	cAMP-regulated phosphoprotein
1413	EST02447	R	cAMP-specific phosphodiesterase
37	EST00038	R	ras p21-like small GTP-binding protein (smg GDS)
102	EST00248	R	rho H12/ ARH12
299	EST00249	R	smg p25A GDP dissociation inhibitor
189	EST00282	R	trkB
1332	EST02362	R	GA binding protein, beta subunit
1277	EST02306	R	Bib protein
43	EST00371	R	Maternal G10 protein
1704	EST01580	R	Myeloid differentiation primary response gene My
346	EST01828	R	Otd homeotic protein
187	EST00152	R	Wilm's tumor-related protein
249	EST00275	R	Zinc Finger Proteins
413	EST01446	R	Zinc Finger Proteins
469	EST01460	R	Zinc Finger Proteins
833	EST01560	R	Zinc Finger Proteins
1230	EST02259	R	Zinc finger proteins
1496	EST02534	R	Zinc finger proteins
2324	EST01352	R	Zinc Finger Proteins
208	EST00250	S	60K filarial antigen
2320	EST01784	S	60K filarial antigen
251	EST00370	S	Actin, other
2146	EST01218	S	Actin, other
248	EST00271	S	Actinin, alpha
891	EST01891	S	Actinin, alpha
1500	EST02538	S	Actinin, alpha
132	EST00110	S	Agrin
1852	EST01625	S	Agrin
1965	EST01664	S	Amyloid A4
2068	EST01694	S	Amyloid A4
2408	EST00244	S	Amyloid A4
1880	EST01634	S	Axonal glycoprotein TAG-1
2004	EST01676	S	Cofilin
650	EST00642	S	Dilute (myosin heavy chain)
2217	EST01738	S	Gelation factor ABP-280
1885	EST01639	S	Histocompatibility antigen modifier 1
77	EST00257	S	Kinesin
SEQ ID	EST#	Group	Putative Identification
78	EST00258	S	Kinesin
2245	EST01748	S	Kinesin
313	EST00276	S	Lysosomal membrane glycoprotein 1 (LAMP-1)
223	EST00368	S	Microtubule-associated protein 1B
824	EST01865	S	Microtubule-associated protein 1B
2032	EST01683	S	Microtubule-associated protein 1B
2017	EST01678	S	Milk fat globule membrane protein
1567	EST02610	S	Neural cell adhesion molecule L1
506	EST01471	S	Neuraxin
2368	EST01389	S	Radial spoke protein 3
951	EST01960	S	Spectrin, beta
2089	EST01699	S	Sperm membrane protein
653	EST01512	S	Tubulin, alpha
311	EST00270	S	Tubulin, beta
594	EST01490	S	Tubulin, beta
757	EST01542	S	Tubulin, beta
1245	EST02274	S	Tubulin, beta
1589	EST02634	S	Tubulin, beta
1468	EST02505	S	Matrin 3

Table 10: Thr e-Class Functional Groupings of ESTs

SEQ ID	EST#	Group	Putative Identification
1834	EST01620	M	AMP deaminase, brain
97	EST00289	M	Aconitase
691	EST00675	M	Alcohol dehydrogenase
2092	EST01700	M	Anion exchanger homolog AE3
396	EST01443	M	CDPdiacylglycerol-serine O-phosphatidyltransferase
1956	EST01663	M	Ca ²⁺ -transporting ATPase 2
1039	EST02055	M	Calcium channel
2192	EST01257	M	Diacylglycerol kinase, lymphocyte
1441	EST02477	M	Diamine acetyltransferase
2289	EST01325	M	Fatty acid synthase
310	EST00377	M	Fo ATPase beta subunit, mitochondrial
1667	EST00825	M	Gamma-aminobutyric acid transporter
1412	EST02446	M	Glutamate-aspartate carrier protein
1020	EST02034	M	Glutaminase
2326	EST01791	M	Inositol-1,4,5-trisphosphate 3-kinase
2173	EST01724	M	Lon protease
1427	EST02463	M	Long-chain-fatty-acid-CoA ligase
2226	EST01744	M	NAD(P) ⁺ transhydrogenase (B-specific)
1566	EST02609	M	Neutrophil oxidase factor
1681	EST01573	M	Nucleoside diphosphate kinase
2254	EST01751	M	Phosphatidylinositol-4,5-bisphosphate phosphodiesterase
93	EST00287	M	Processing enhancing protein
2297	EST01775	M	Prohormone cleavage enzyme
9	EST00376	M	Prolyl endopeptidase
1654	EST01572	M	Protochlorophyllide reductase
38	EST00374	M	RNA polymerase II 6th subunit (RPO26)
1715	EST01583	M	Ribosomal protein L18a
1856	EST01627	M	Ribosomal protein L1a
1974	EST01667	M	Ribosomal protein L3
301	EST00300	M	Ribosomal protein L30
22	EST00301	M	Ribosomal protein S10
2402	EST01826	M	Ribosomal protein S10
463	EST01459	M	Ribosomal protein YL10
2073	EST01697	M	Succinate dehydrogenase flavoprotein
2138	EST01715	M	Succinate dehydrogenase flavoprotein
1771	EST01601	M	Thiosulfate sulfurtransferase (rhodanese)
2121	EST01711	M	Valine-tRNA ligase
1726	EST01588	M	XPR2 alkaline extracellular protease
913	EST01913	M	Clathrin coat assembly protein AP50 homolog
1035	EST02051	M	J1 protein
969	EST01982	R	ADP-ribosylation factor 1
1126	EST02146	R	Calbindin D28
1910	EST01645	R	Calmodulin
485	EST01466	R	Calmodulin-dependent protein kinase, type II, beta
2302	EST01779	R	Discs-large tumor suppressor
188	EST00256	R	Enhancer of split
1229	EST02258	R	KUP protein
993	EST02007	R	Kinase 5 protein
2282	EST01764	R	Lamin B receptor
SEQ ID	EST#	Group	Putative Identification
161	EST00247	R	MARCKS (myristoylated alanine-rich protein kinase)
769	EST00734	R	MARCKS homolog
1386	EST02418	R	MARCKS homolog
227	EST00259	R	Notch/Kotch
952	EST01961	R	Notch/Kotch
1395	EST02429	R	Nuclear factor 1-like protein (NF1)
2353	EST01806	R	Prohibitin
1069	EST02087	R	Protein kinase C, zeta
1933	EST01650	R	Protein phosphatase 2A beta subunit

EXAMPLE 10

Functional Groupings of ESTs and Corresponding Genes

By matching new human ESTs to known sequences from other species, the apparent function of the gene corresponding to the EST can be ascertained. The data generated in Example 3 and 4 have been used to categorize 127 of the ESTs of the present invention, and their corresponding genes, into predicted functional groups. (These 127 are ESTs with database matches to sequences from other species for which a function was known.) Two different grouping schemes have been used.

The first scheme separates the sequences into three broad categories: metabolic; regulatory; and structural. These groupings are set out in Table 10.

The second grouping scheme separates the sequences into 13 specific categories: cell surface proteins; developmental control; energy metabolism; kinases and phosphatases; oncogenes; other metabolism-related polypeptides; peptidases and peptidase inhibitors; receptors; structural and cytoskeletal; signal transduction; transporters; transcription, translation, and subcellular localization; and transcription factors. These groupings are set out in Table 11.

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<u>SEQ</u>	<u>ID#</u>	<u>EST#</u>
2389		EST01407
2391		EST01415
2392		EST01416
2395		EST01419
2397		EST01421
2401		EST01424
2403		EST01425
2404		EST01426
2406		EST02713
2409		EST00273

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1907	EST01022	2016	EST01110	2118	EST01194	2223	EST01742	2332	EST01794
1908	EST01023	2018	EST01111	2119	EST01195	2224	EST01277	2333	EST01357
1909	EST01024	2019	EST01112	2122	EST01197	2228	EST01280	2335	EST01359
1911	EST02694	2020	EST01113	2123	EST01713	2229	EST01281	2336	EST01360
1912	EST01025	2021	EST01114	2124	EST01198	2231	EST01746	2337	EST01361
1913	EST01646	2022	EST01115	2125	EST01199	2237	EST01288	2340	EST01802
1915	EST01027	2023	EST01116	2126	EST01200	2238	EST01289	2341	EST01364
1916	EST01028	2025	EST01118	2127	EST01201	2239	EST01290	2343	EST01366
1917	EST01029	2026	EST01119	2129	EST01203	2240	EST01291	2344	EST01367
1918	EST02695	2027	EST01120	2130	EST01204	2241	EST01747	2349	EST01372
1919	EST01030	2028	EST01121	2132	EST01206	2242	EST01292	2350	EST02708
1920	EST01031	2029	EST01682	2133	EST01207	2243	EST01293	2352	EST01374
1921	EST01647	2030	EST01122	2135	EST01209	2244	EST01294	2356	EST01377
1922	EST01032	2033	EST01684	2137	EST01211	2246	EST01295	2357	EST01378
1923	EST01033	2034	EST01124	2139	EST01716	2247	EST01296	2360	EST01381
1924	EST01034	2035	EST01125	2140	EST01212	2249	EST01298	2361	EST01382
1925	EST01035	2036	EST01126	2142	EST01214	2251	EST01300	2363	EST01384
1926	EST01036	2037	EST01686	2143	EST01215	2252	EST01750	2364	EST01385
1927	EST01037	2038	EST01127	2147	EST01219	2253	EST01301	2365	EST01386
1929	EST01039	2039	EST01128	2148	EST01220	2256	EST02718	2366	EST01387
1932	EST01042	2040	EST01129	2151	EST01223	2257	EST01303	2369	EST01811
1934	EST01043	2042	EST01688	2152	EST01224	2258	EST01754	2370	EST01390
1935	EST01044	2045	EST01133	2154	EST01226	2260	EST01305	2371	EST01391
1936	EST01045	2047	EST01135	2156	EST01718	2261	EST01755	2372	EST01392
1937	EST01652	2048	EST01136	2157	EST01719	2262	EST01306	2375	EST01815
1938	EST01654	2049	EST01689	2158	EST01228	2264	EST01308	2376	EST01395
1941	EST01047	2050	EST01137	2159	EST01229	2265	EST01309	2377	EST01396
1942	EST01048	2052	EST01139	2160	EST01230	2268	EST01311	2379	EST01398
1943	EST01049	2053	EST01140	2162	EST01232	2269	EST01312	2380	EST01399
1945	EST01051	2054	EST01141	2163	EST01233	2270	EST01313	2381	EST01400
1946	EST02696	2055	EST01690	2164	EST01234	2271	EST01314	2382	EST01401
1947	EST01052	2057	EST01143	2165	EST01720	2272	EST01762	2383	EST01402
1948	EST01053	2061	EST01147	2166	EST01236	2273	EST01315	2384	EST01403
1950	EST01055	2062	EST02701	2167	EST01237	2275	EST01316	2385	EST01816
1951	EST01056	2063	EST01148	2169	EST01722	2276	EST01317	2386	EST01404
1952	EST01057	2065	EST01691	2170	EST01239	2277	EST01318	2387	EST01405
1955	EST01662	2066	EST01692	2171	EST01240	2278	EST01319		
1957	EST01059	2067	EST01693	2172	EST01241	2279	EST01320		
1958	EST01060	2069	EST01150	2175	EST01243	2280	EST01763		
1959	EST01061	2070	EST01151	2177	EST01245	2284	EST01323		
1963	EST01063	2072	EST01152	2178	EST01726	SEQ ID#	EST#		
1964	EST01064	2074	EST01698	2179	EST01246				
1966	EST01065	2075	EST01153	2180	EST01247	2285	EST01768		
1968	EST01067	2076	EST02702	2181	EST01248	2287	EST01770		
1969	EST01068	2077	EST01154	SEQ ID#	EST#	2288	EST01324		
1970	EST01666	2078	EST01155			2290	EST01772		
1971	EST01069	2079	EST01156	2182	EST01249	2291	EST01773		
1972	EST01070	2080	EST01157	2183	EST01250	2292	EST01326		
1975	EST01073	SEQ ID#	EST#	2185	EST01252	2293	EST01327		
1976	EST01074	2081	EST01158	2186	EST01253	2294	EST01328		
1978	EST01076	2082	EST01159	2187	EST01727	2295	EST01329		
1979	EST01077	2083	EST01160	2188	EST01254	2296	EST01330		
SEQ ID#	EST#	2084	EST01161	2190	EST01728	2298	EST01331		
1980	EST01078	2085	EST01162	2191	EST01256	2299	EST01332		
1981	EST01079	2086	EST01163	2193	EST01258	2301	EST01334		
1983	EST01081	2087	EST01164	2194	EST01729	2304	EST01780		
1984	EST01082	2088	EST01166	2195	EST01259	2305	EST01336		
1985	EST01083	2091	EST01168	2197	EST01261	2306	EST01337		
1986	EST01084	2093	EST01170	2198	EST01730	2310	EST01341		
1988	EST01085	2095	EST01701	2199	EST01262	2311	EST01342		
1989	EST01086	2096	EST01172	2200	EST01731	2312	EST01343		
1995	EST01092	2097	EST01173	2201	EST01263	2313	EST01344		
1996	EST01093	2098	EST01174	2202	EST01732	2315	EST01346		
1998	EST01095	2099	EST01175	2205	EST01735	2316	EST01782		
1999	EST01096	2103	EST01179	2206	EST01736	2317	EST01347		
2002	EST01099	2104	EST01180	2208	EST01267	2318	EST01348		
2003	EST01675	2107	EST01183	2209	EST02717	2319	EST01349		
2005	EST01100	2108	EST01184	2210	EST01268	2321	EST01350		
2006	EST01101	2109	EST01185	2211	EST01269	2322	EST01351		
2007	EST01102	2110	EST01186	2213	EST01271	2323	EST01789		
2009	EST01677	2111	EST01187	2215	EST01273	2325	EST01353		
2010	EST01104	2112	EST01188	2218	EST01274	2327	EST01354		
2011	EST01105	2113	EST01189	2219	EST01275	2328	EST01355		
2014	EST01108	2114	EST01190	2220	EST01740	2329	EST01792		
2015	EST01109	2115	EST01191	2221	EST01741	2330	EST01793		
				2222	EST01276	2331	EST01356		

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992	EST02006	1086	EST02105	1184	EST02209	1274	EST02303	1363	EST02394
994	EST02008	1087	EST02106	1185	EST02210	1275	EST02304	1364	EST02395
997	EST02011	1088	EST02107	1186	EST02211	1276	EST02305	1366	EST02397
999	EST02013	1091	EST02110	1187	EST02212	1278	EST02307	1367	EST02398
1001	EST02015	1093	EST02112	1188	EST02213	1279	EST02308	1368	EST02399
1002	EST02016	1095	EST02114	1189	EST02214	1280	EST02309	1370	EST02401
1003	EST02017	1097	EST02116	1190	EST02215	1281	EST02310	1372	EST02403
1005	EST02019	1098	EST02117	1191	EST02216	1282	EST02311	1373	EST02404
1006	EST02020	1100	EST02119	1192	EST02217	1283	EST02312	1375	EST02406
1008	EST02022	1101	EST02120	1193	EST02218	1284	EST02313	1376	EST02407
1009	EST02023	1102	EST02121	1194	EST02219	1286	EST02316	1377	EST02408
1010	EST02024	1104	EST02123	1195	EST02220	1288	EST02318	1378	EST02409
1011	EST02025	1106	EST02125	1197	EST02222	1289	EST02319	1379	EST02410
1012	EST02026	1107	EST02126	1198	EST02223	1290	EST02320	1380	EST02411
1013	EST02027	1108	EST02127	1199	EST02224	1291	EST02321	1381	EST02413
1014	EST02028	1109	EST02128	1200	EST02226	1292	EST02322	1382	EST02414
1015	EST02029	1110	EST02129	1201	EST02228	1293	EST02323		
1016	EST02030	1111	EST02131	1202	EST02229	1294	EST02324		
1017	EST02031	1112	EST02132	1203	EST02230	1295	EST02325		
1019	EST02033	1114	EST02134	1204	EST02232	1296	EST02326		
1022	EST02036	1117	EST02137	1206	EST02234	SEQ ID#	EST#		
1023	EST02037	1119	EST02139	1207	EST02235				
1024	EST02038	1120	EST02140	1208	EST02236	1298	EST02328		
1025	EST02040	1121	EST02141	1209	EST02237	1299	EST02329		
1026	EST02041	1122	EST02142	SEQ ID#	EST#	1300	EST02330		
1027	EST02042	1123	EST02143			1302	EST02332		
1028	EST02043	1124	EST02144	1211	EST02239	1303	EST02333		
1029	EST02044	1125	EST02145	1212	EST02240	1304	EST02334		
1030	EST02045	SEQ ID#	EST#	1213	EST02241	1305	EST02335		
1032	EST02048			1214	EST02242	1306	EST02336		
1033	EST02049	1127	EST02147	1215	EST02244	1307	EST02337		
1036	EST02052	1128	EST02148	1216	EST02245	1309	EST02339		
SEQ ID#	EST#	1130	EST02150	1217	EST02246	1310	EST02340		
		1131	EST02151	1218	EST02247	1311	EST02341		
1037	EST02053	1132	EST02152	1219	EST02248	1313	EST02343		
1038	EST02054	1135	EST02155	1220	EST02249	1314	EST02344		
1040	EST02056	1136	EST02156	1221	EST02250	1315	EST02345		
1042	EST02058	1137	EST02157	1223	EST02252	1316	EST02346		
1044	EST02060	1138	EST02159	1225	EST02254	1317	EST02347		
1045	EST02061	1140	EST02162	1226	EST02255	1318	EST02348		
1046	EST02062	1142	EST02164	1227	EST02256	1319	EST02349		
1048	EST02064	1143	EST02165	1232	EST02261	1320	EST02350		
1049	EST02065	1144	EST02166	1234	EST02263	1321	EST02351		
1050	EST02066	1145	EST02167	1235	EST02264	1322	EST02352		
1051	EST02067	1148	EST02170	1236	EST02265	1323	EST02353		
1052	EST02068	1149	EST02171	1237	EST02266	1325	EST02355		
1053	EST02069	1150	EST02172	1238	EST02267	1326	EST02356		
1054	EST02070	1152	EST02174	1239	EST02268	1327	EST02357		
1055	EST02071	1153	EST02175	1240	EST02269	1328	EST02358		
1056	EST02072	1154	EST02176	1241	EST02270	1329	EST02359		
1057	EST02073	1155	EST02177	1242	EST02271	1330	EST02360		
1058	EST02074	1156	EST02178	1244	EST02273	1333	EST02363		
1059	EST02075	1157	EST02180	1246	EST02275	1334	EST02364		
1060	EST02076	1158	EST02181	1247	EST02276	1335	EST02365		
1061	EST02078	1159	EST02182	1248	EST02277	1336	EST02366		
1062	EST02079	1160	EST02183	1249	EST02278	1337	EST02367		
1063	EST02081	1161	EST02184	1250	EST02279	1338	EST02368		
1064	EST02082	1162	EST02185	1251	EST02280	1339	EST02369		
1065	EST02083	1164	EST02188	1252	EST02281	1342	EST02372		
1066	EST02084	1165	EST02189	1253	EST02282	1343	EST02373		
1067	EST02085	1166	EST02190	1254	EST02283	1345	EST02375		
1068	EST02086	1167	EST02191	1255	EST02284	1346	EST02376		
1070	EST02088	1168	EST02193	1256	EST02285	1347	EST02377		
1071	EST02089	1169	EST02194	1257	EST02286	1349	EST02379		
1072	EST02090	1170	EST02195	1258	EST02287	1350	EST02380		
1073	EST02091	1171	EST02196	1259	EST02288	1351	EST02381		
1074	EST02092	1172	EST02197	1260	EST02289	1352	EST02382		
1075	EST02093	1173	EST02198	1261	EST02290	1353	EST02383		
1076	EST02094	1174	EST02199	1262	EST02291	1354	EST02384		
1077	EST02096	1175	EST02200	1263	EST02292	1355	EST02385		
1078	EST02097	1176	EST02201	1268	EST02297	1357	EST02387		
1079	EST02098	1177	EST02202	1269	EST02298	1358	EST02388		
1080	EST02099	1178	EST02203	1270	EST02299	1359	EST02390		
1082	EST02101	1179	EST02204	1271	EST02300	1360	EST02391		
1084	EST02103	1180	EST02205	1272	EST02301	1361	EST02392		
1085	EST02104	1182	EST02207	1273	EST02302	1362	EST02393		

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498	EST01467	600	EST01492	697	EST00680	799	EST00752	894	EST01894
499	EST01468	601	EST01493	698	EST00681	800	EST00753	895	EST01895
500	EST00527	603	EST01494	701	EST01522	801	EST00754	896	EST01896
501	EST02715	604	EST00607	702	EST00684	804	EST00757	897	EST01897
502	EST01469	605	EST00608	703	EST00685	805	EST00758	898	EST01898
507	EST00530	609	EST01496	704	EST00686	806	EST00759	899	EST01899
508	EST00531	610	EST00612	705	EST00687	807	EST00760	900	EST01900
509	EST01472	611	EST00613	706	EST00688	809	EST00762	901	EST01901
510	EST00532	612	EST00614	708	EST00689	810	EST00763	902	EST01902
511	EST00533	615	EST00616	709	EST00690	811	EST00764	903	EST01903
512	EST00534	616	EST01497	710	EST00691	813	EST00765	904	EST01904
513	EST00535	618	EST01498	711	EST00692	814	EST00766	905	EST01905
514	EST00536	620	EST01499	712	EST00693	815	EST01855	906	EST01906
515	EST00537	622	EST01843	713	EST00694	816	EST01856	908	EST01908
519	EST00541	623	EST00621	714	EST00695	817	EST01857	909	EST01909
520	EST00542	624	EST01500	715	EST01523	818	EST01858	910	EST01910
521	EST01474	625	EST01844	716	EST01524	819	EST01859	911	EST01911
523	EST01838	627	EST00623	717	EST01525	820	EST01860	914	EST01914
525	EST00545	628	EST01503	718	EST00696	822	EST01863	915	EST01915
527	EST00547	629	EST00624	719	EST01526	825	EST01866	916	EST01917
528	EST00548	630	EST01505	720	EST00697	826	EST01867	917	EST01919
530	EST01477	631	EST00625	721	EST01527	827	EST01558	918	EST01920
531	EST00550	632	EST00626	722	EST01528	828	EST00767	920	EST01922
533	EST00552	633	EST00627	723	EST00698	830	EST01559	921	EST01923
534	EST01478	634	EST00628	725	EST00699	831	EST00769	922	EST01924
535	EST00553	636	EST01507	728	EST00702	832	EST00770	923	EST01925
536	EST01479	637	EST00630	730	EST00704	837	EST01561	925	EST01927
537	EST00554	638	EST00631	731	EST00705	838	EST00774	926	EST01929
538	EST00555	640	EST01509	732	EST00706	839	EST01562	927	EST01930
539	EST00556	641	EST00633	733	EST00707	840	EST00775	928	EST01931
541	EST00558	643	EST00635	734	EST00708	841	EST00776	931	EST01934
542	EST01480	645	EST00637	735	EST00709	842	EST01563	932	EST01935
543	EST00559	646	EST00638	736	EST01532	843	EST01564	933	EST01936
544	EST00560	647	EST00639	737	EST00710	844	EST01565	934	EST01937
545	EST01481	648	EST00640	739	EST01534	846	EST00778	937	EST01940
547	EST00561	649	EST00641	740	EST01535	847	EST00779	939	EST01943
548	EST00562	651	EST00643	741	EST00712	848	EST01566	SEQ ID#	EST#
550	EST00564	652	EST01510	744	EST01537	849	EST01567	940	EST01944
553	EST00566	654	EST00644	746	EST00716	850	EST00780	941	EST01945
555	EST01483	655	EST00645	748	EST01850	851	EST00781	942	EST01947
556	EST00568	656	EST01513	749	EST00719	SEQ ID#	EST#	943	EST01948
558	EST01484	658	EST00647	750	EST01539	853	EST00783	944	EST01949
560	EST01485	659	EST00648	751	EST01540	855	EST00785	945	EST01950
561	EST00571	661	EST00650	754	EST00722	856	EST01568	946	EST01953
562	EST00572	662	EST00651	SEQ ID#	EST#	857	EST01868	947	EST01954
563	EST00573	663	EST00652	756	EST01541	858	EST01869	949	EST01958
564	EST00574	664	EST00653	758	EST00724	859	EST01870	950	EST01959
565	EST00575	665	EST00654	761	EST01544	860	EST00786	953	EST01962
566	EST00576	SEQ ID#	EST#	762	EST00727	861	EST01871	954	EST01963
567	EST00577	666	EST01514	763	EST00728	863	EST01873	956	EST01968
568	EST00578	667	EST00655	765	EST00730	864	EST00787	957	EST01969
569	EST00579	668	EST00656	766	EST00731	865	EST01569	958	EST01970
SEQ ID#	EST#	669	EST00657	767	EST00732	866	EST01874	959	EST01972
571	EST00581	670	EST00658	768	EST00733	867	EST01875	960	EST01973
572	EST00582	671	EST00659	770	EST00735	868	EST01876	961	EST01974
574	EST00584	672	EST00660	771	EST01546	869	EST00788	962	EST01975
575	EST00585	673	EST01515	772	EST00736	870	EST00789	963	EST01976
577	EST00587	674	EST01516	774	EST01548	871	EST00790	964	EST01977
580	EST00590	675	EST00661	775	EST00737	872	EST00791	966	EST01979
581	EST00591	676	EST00662	777	EST00739	873	EST00792	967	EST01980
583	EST00593	677	EST00663	779	EST00741	874	EST00793	970	EST01983
584	EST00594	678	EST01517	780	EST01549	875	EST00794	972	EST01986
585	EST00595	679	EST01518	781	EST01550	876	EST00795	974	EST01988
586	EST00596	680	EST00664	783	EST01552	877	EST01877	975	EST01989
587	EST01488	682	EST00666	785	EST01553	878	EST01878	976	EST01990
588	EST00597	683	EST00667	786	EST00742	879	EST01879	977	EST01991
589	EST00598	684	EST00668	787	EST00743	880	EST01880	978	EST01992
590	EST00599	685	EST00669	788	EST00744	882	EST01882	981	EST01995
591	EST01489	686	EST00670	789	EST00745	883	EST01883	982	EST01996
592	EST00600	688	EST00672	790	EST01554	885	EST01885	983	EST01997
593	EST00601	690	EST00674	792	EST00747	887	EST01887	984	EST01998
595	EST01840	692	EST00676	793	EST00748	889	EST01889	987	EST02001
597	EST00603	693	EST00677	794	EST01555	890	EST01890	989	EST02003
598	EST00604	694	EST00678	796	EST00750	892	EST01892	990	EST02004
599	EST00605	696	EST01521	797	EST00751	893	EST01893	991	EST02005

Table 9: ESTs with Poor Coding Probability

SEQ ID#	EST#	103	EST00317	204	EST00235	309	EST00174	404	EST00453
		104	EST00354	206	EST00166	315	EST00008	405	EST00454
1	EST00007	105	EST00365	207	EST00167	316	EST00378	406	EST00455
2	EST00009	107	EST00093	209	EST00331	317	EST00379	407	EST00456
3	EST00010	109	EST00095	210	EST00168	318	EST00380	408	EST00457
4	EST00011	111	EST00281	211	EST00332	320	EST00382	409	EST01444
5	EST00012	112	EST00318	212	EST00169	321	EST00383	410	EST00458
6	EST00013	113	EST00097	213	EST00170	322	EST00384	411	EST00459
8	EST00234	116	EST00100	214	EST00171	323	EST00385	412	EST01445
10	EST00016	117	EST00319	216	EST00173	325	EST00386	416	EST00462
14	EST00019	118	EST00101	219	EST00176	326	EST00387	417	EST00463
16	EST00021	119	EST00102	220	EST00372	327	EST00388	419	EST00465
17	EST00022	120	EST00103	221	EST00359	328	EST00389	420	EST00466
18	EST00373	121	EST00104	224	EST00356	329	EST00390	421	EST00467
19	EST00023	122	EST00105	225	EST00178	330	EST00391	422	EST01447
21	EST00025	123	EST00106	226	EST00333	331	EST00392	423	EST00468
23	EST00026	125	EST00108	229	EST00180	332	EST00393	424	EST01448
25	EST00028	126	EST00109	231	EST00334	334	EST00395	425	EST00469
27	EST00029	127	EST00320	232	EST00182	335	EST00396	427	EST01449
28	EST00030	129	EST00321	233	EST00183	337	EST00398	428	EST01451
29	EST00031	130	EST00355	235	EST00185	340	EST00402	429	EST00471
30	EST00032	131	EST00322	236	EST00186	341	EST00403	431	EST00473
31	EST00033	133	EST00111	237	EST00187	342	EST00404	432	EST01452
32	EST00233	134	EST00375	238	EST00188	344	EST00405	434	EST00475
33	EST00034	135	EST00112	239	EST00189	345	EST00406	435	EST00476
34	EST00035	136	EST00113	240	EST00335	347	EST01829	436	EST00477
35	EST00036	138	EST00114	241	EST00191	348	EST01830	437	EST00478
36	EST00037	139	EST00116	242	EST00192	349	EST01831	438	EST00479
39	EST00039	140	EST00117	243	EST00193	350	EST00407	439	EST00480
40	EST00040	141	EST00118	244	EST00194	351	EST00408	440	EST01454
41	EST00041	142	EST00323	245	EST00347	352	EST00409	442	EST01456
42	EST00042	143	EST00119	246	EST00196	353	EST00410	443	EST00482
46	EST00044	146	EST00122	250	EST00197	354	EST01433	444	EST00483
47	EST00046	147	EST00292	252	EST00198	355	EST00411	446	EST00485
49	EST00047	148	EST00236	254	EST00200	356	EST00412	447	EST00486
50	EST00048	149	EST00123	255	EST00201	357	EST00413	448	EST00487
51	EST00049	150	EST00124	256	EST00345	358	EST00414	449	EST00488
52	EST00052	151	EST00125	257	EST00337	359	EST00415	450	EST00489
53	EST00054	152	EST00126	259	EST00202	360	EST00416	451	EST00490
54	EST00055	153	EST00127	260	EST00357	361	EST00417	452	EST00491
55	EST00056	154	EST00128	261	EST00338	363	EST00419	455	EST00494
56	EST00057	155	EST00129	262	EST00339	364	EST00420	457	EST00495
57	EST00058	157	EST00131	265	EST00205	365	EST01434	458	EST00496
58	EST00059	158	EST00132	266	EST00206	366	EST00421	459	EST00497
59	EST00061	159	EST00325	272	EST00340	367	EST00422	460	EST01457
60	EST00062	160	EST00326	274	EST00268	369	EST00424	461	EST01836
63	EST00065	162	EST00133	275	EST00209	372	EST00427	462	EST00498
64	EST00066	163	EST00134	278	EST00342	373	EST01832	464	EST00499
67	EST00351	165	EST00136	279	EST00213	374	EST00428	465	EST00500
68	EST00068	167	EST00138	280	EST00343	375	EST00429	466	EST00501
69	EST00360	168	EST00140	283	EST00215	376	EST01436	467	EST00502
71	EST00070	169	EST00141	284	EST00216	377	EST00430	468	EST00503
73	EST00072	170	EST00295	286	EST00217	378	EST00431	470	EST00504
74	EST00073	171	EST00327	287	EST00218	379	EST00432	SEQ ID#	EST#
76	EST00075	172	EST00142	288	EST00219	380	EST01439		
80	EST00077	173	EST00143	289	EST00220	381	EST00433	473	EST00506
81	EST00315	175	EST00144	290	EST00221	382	EST00434	474	EST00507
83	EST00079	178	EST00294	291	EST00222	SEQ ID#	EST#	477	EST01463
84	EST00080	182	EST00329	292	EST00223			478	EST00510
85	EST00081	184	EST00149	293	EST00224	383	EST00435	479	EST00511
86	EST00082	185	EST00150	294	EST00225	384	EST01440	480	EST01464
87	EST00083	186	EST00151	SEQ ID#	EST#	386	EST00437	481	EST00512
89	EST00085	190	EST00153			388	EST00439	482	EST01465
91	EST00086	191	EST00154	295	EST00226	390	EST01442	483	EST00513
92	EST00087	194	EST00157	297	EST00230	391	EST00441	484	EST00514
94	EST00353	SEQ ID#	EST#	298	EST00231	393	EST00443	487	EST00516
95	EST00088			302	EST00303	395	EST00445	488	EST00517
96	EST00089	195	EST00158	303	EST00348	397	EST00446	489	EST00518
99	EST00316	196	EST00159	304	EST00307	398	EST00447	490	EST00519
SEQ ID#	EST#	197	EST00160	305	EST00308	399	EST00448	491	EST00520
		198	EST00161	306	EST00309	400	EST00449	492	EST00521
100	EST00090	199	EST00277	307	EST00312	401	EST00450	495	EST00524
101	EST00091	203	EST00164	308	EST00314	403	EST00452	497	EST00526

Table 8: ESTs with Marginal Probability of Containing Coding Sequence

<u>SEQ ID#</u>	<u>EST#</u>		
11	EST00018	1222	EST02251
12	EST00274	1224	EST02253
24	EST00027	1228	EST02257
45	EST00364	1267	EST02296
79	EST00076	1301	EST02331
90	EST00302	1397	EST02431
110	EST00096	1448	EST02484
144	EST00120	1480	EST02517
145	EST00121	1493	EST02531
192	EST00155	1499	EST02537
222	EST00177	1503	EST02541
234	EST00184	1527	EST02568
277	EST00212	1536	EST02577
319	EST00381	1548	EST02590
368	EST00423	1562	EST02605
370	EST00425	1572	EST02615
387	EST00438	1575	EST02618
402	EST00451	1595	EST02640
415	EST00461	1608	EST02653
418	EST00464	1610	EST02655
426	EST00470	1621	EST02667
503	EST00528	1627	EST02674
517	EST00539	1629	EST02677
522	EST00543	1631	EST02678
532	EST00551	1683	EST00840
540	EST00557	1692	EST00847
570	EST00580	1751	EST00895
573	EST00583	1756	EST00900
576	EST00586	1764	EST02690
613	EST00615	1770	EST00910
617	EST00617	1793	EST00929
626	EST00622	1847	EST00973
681	EST00665	1877	EST00998
726	EST00700	1897	EST01012
727	EST00701	1900	EST01015
738	EST00711	1939	EST01655
745	EST00715	1940	EST01046
752	EST00720	1954	EST01058
791	EST00746	<u>SEQ ID#</u>	<u>EST#</u>
795	EST00749	1990	EST01087
803	EST00756	2008	EST01103
845	EST00777	2031	EST01123
852	EST00782	2041	EST01130
854	EST00784	2044	EST01132
907	EST01907	2060	EST01146
912	EST01912	2100	EST01176
935	EST01938	2136	EST01210
<u>SEQ ID#</u>	<u>EST#</u>	2153	EST01225
968	EST01981	2204	EST01265
985	EST01999	2212	EST01270
988	EST02002	2248	EST01297
1043	EST02059	2250	EST01299
1081	EST02100	2266	EST01310
1089	EST02108	2309	EST01340
1116	EST02136	2347	EST01370
1134	EST02154	2388	EST01406
1205	EST02233	2398	EST01422
		2405	EST01427

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Table 7: ESTs with Good Probability of Containing Coding Sequence

<u>SEQ ID#</u>	<u>EST#</u>				
20	EST00024	1041	EST02057	2362	EST01383
72	EST00071	1083	EST02102	2378	EST01397
82	EST00078	1099	EST02118	2399	EST01423
88	EST00084	1105	EST02124	2407	EST02714
137	EST00272	1113	EST02133		
177	EST00328	1139	EST02161		
193	EST00156	1146	EST02168		
200	EST00162	1196	EST02221		
218	EST00175	1210	EST02238		
228	EST00179	1233	EST02262		
247	EST00279	1285	EST02314		
264	EST00204	1331	EST02361		
267	EST00297	1388	EST02421		
296	EST00228	1418	EST02453		
371	EST00426	1439	EST02475		
385	EST00436	1502	EST02540		
392	EST00442	1537	EST02578		
414	EST00460	1563	EST02606		
433	EST00474	1599	EST02644		
453	EST00492	1602	EST02647		
471	EST00505	1693	EST00848		
496	EST00525	1695	EST00850		
524	EST00544	1729	EST00877		
526	EST00546	1730	EST00878		
529	EST00549	1738	EST00883		
549	EST00563	1739	EST00885		
557	EST00569	1743	EST00888		
578	EST00588	1768	EST00908		
596	EST00602	1780	EST00916		
607	EST00610	1804	EST00938		
619	EST00619	1805	EST00939		
657	EST00646	1811	EST00945		
660	EST00649	1819	EST00950		
689	EST00673	1826	EST00956		
695	EST00679	1830	EST00959		
699	EST00682	1845	EST00971		
729	EST00703	1848	EST00974		
742	EST00713	1853	EST00977		
747	EST00717	1967	EST01066		
755	EST00723	1992	EST01089		
759	EST00725	1994	EST01091		
776	EST00738	<u>SEQ ID#</u>	<u>EST#</u>		
778	EST00740	1997	EST01094		
782	EST01551	2046	EST01134		
829	EST00768	2101	EST01177		
835	EST00772	2102	EST01178		
836	EST00773	2105	EST01181		
862	EST01872	2106	EST01182		
881	EST01881	2141	EST01213		
<u>SEQ ID#</u>	<u>EST#</u>	2184	EST01251		
884	EST01884	2196	EST01260		
924	EST01926	2203	EST01264		
929	EST01932	2232	EST01283		
938	EST01941	2308	EST01339		
971	EST01985	2345	EST01368		
995	EST02009	2346	EST01369		
996	EST02010	2351	EST01373		
1031	EST02046	2354	EST01375		
		2355	EST01376		
		2359	EST01380		

Table 6: ESTs with Excellent Probability of Containing Coding Sequence

SEQ ID#	EST#						
7	EST00014	973	EST01987	1807	EST00941	2373	EST01393
15	EST00020	979	EST01993	1809	EST00943	2374	EST01394
48	EST00291	980	EST01994	1820	EST00951	2393	EST01417
62	EST00064	986	EST02000	1829	EST00958	2394	EST01418
66	EST00067	1000	EST02014	1849	EST00975	2396	EST01420
75	EST00074	1004	EST02018	1860	EST00983		
98	EST00260	1007	EST02021	1866	EST00989		
106	EST00092	1018	EST02032	1871	EST00994		
108	EST00094	1021	EST02035	1888	EST01005		
114	EST00098	1034	EST02050	1890	EST01007		
115	EST00099	1047	EST02063	1892	EST01009		
124	EST00107	1090	EST02109	1903	EST01018		
128	EST00252	1096	EST02115	1904	EST01019		
156	EST00130	1115	EST02135	1914	EST01026		
164	EST00135	1118	EST02138	1930	EST01040		
166	EST00137	1129	EST02149	1944	EST01050		
174	EST00296	1133	EST02153	1949	EST01054		
179	EST00145	1141	EST02163	1962	EST01062		
183	EST00148	1163	EST02187	1973	EST01071		
201	EST00163	1183	EST02208	1977	EST01075		
205	EST00165	1243	EST02272	1982	EST01080		
215	EST00172	1264	EST02293	1991	EST01088		
230	EST00181	1265	EST02294	1993	EST01090		
253	EST00199	1266	EST02295	2000	EST01097		
263	EST00203	1287	EST02317	2001	EST01098		
268	EST00369	1308	EST02338	2012	EST01106		
270	EST00207	1324	EST02354	2013	EST01107		
271	EST00283	1344	EST02374	2024	EST01117		
273	EST00208	1356	EST02386	2043	EST01131		
276	EST00211	1365	EST02396	2051	EST01138		
281	EST00214	1383	EST02415	2056	EST01142		
285	EST00286	1399	EST02433	2058	EST01144		
333	EST00394	1401	EST02435	2059	EST01145		
336	EST00397	1405	EST02439	2064	EST01149		
339	EST00400	1417	EST02452	2090	EST01167		
362	EST00418	1451	EST02487	2094	EST01171		
389	EST00440	1457	EST02493	2116	EST01192		
441	EST00481	1463	EST02500	2117	EST01193		
454	EST00493	1473	EST02510	2128	EST01202		
476	EST00509	1479	EST02516	2131	EST01205		
493	EST00522	1516	EST02555	2134	EST01208		
504	EST00529	1528	EST02569	2144	EST01216		
516	EST00538	1531	EST02572	2145	EST01217		
518	EST00540	1544	EST02586	2150	EST01222		
551	EST01482	1551	EST02593	2155	EST01227		
552	EST00565	1558	EST02601	2161	EST01231		
559	EST00570	1561	EST02604	2163	EST01238		
582	EST00592	1581	EST02625	2174	EST01242		
602	EST00606	1586	EST02631	2176	EST01244		
606	EST00609	1591	EST02636	2189	EST01255		
608	EST00611	1616	EST02661	2214	EST01272		
621	EST00620	1624	EST02670	2225	EST01278		
635	EST00629	1630	EST02676	2227	EST01279		
642	EST00634	1637	EST00796	2233	EST01284		
644	EST00636	1639	EST00799	2235	EST01286		
687	EST00671	1649	EST00808	2236	EST01287		
700	EST00683	1651	EST00810	2255	EST01302		
743	EST00714	1677	EST00835	2259	EST01304		
753	EST00721	1682	EST00839	2263	EST01307		
760	EST00726	1694	EST00849				
764	EST00729	1706	EST00857	SEQ ID#	EST#		
808	EST00761	1708	EST00858	2267	EST01756		
823	EST01864	1710	EST00860	2281	EST01321		
834	EST00771	1716	EST00865	2283	EST01322		
886	EST01886	SEQ ID#	EST#	2300	EST01333		
919	EST01921	1718	EST00867	2303	EST01335		
930	EST01933	1731	EST00879	2303	EST01335		
936	EST01939	1742	EST00887	2314	EST01345		
948	EST01957	1746	EST00891	2334	EST01358		
965	EST01978	1760	EST00903	2339	EST01362		
		1767	EST00907	2342	EST01365		
		1769	EST00909	2348	EST01371		
		1777	EST00913	2358	EST01379		
				2367	EST01388		

EXAMPLE 9

Probability of ESTs Containing Coding Sequences

5 The ESTs of the present invention were statistically
evaluated using the coding-region prediction program CRM
via the GRAIL server (Uberbacher, E. & Mural, R. *Proc.*
10 *Natl. Acad. Sci. USA*, 88: 11261-5 (1991)). The CRM program
uses a neural network to combine results from several
different coding regions by looking at different 6 bp
sequences found in coding exons and in introns. The
program additionally conducts reading frame searches and
assesses randomness at the third position of codons. This
15 protocol categorizes sequences as having an excellent,
good, marginal, or poor probability of containing coding
regions. The results are reported in Tables 6-9. There
were 219 ESTs categorized as "excellent" (Table 6); 120
categorized as "good" (Table 7); 113 categorized as
"marginal" (Table 8); and 1743 categorized as "poor" (Table
9). These results indicate that most ESTs of the present
invention comprise noncoding regions.

TABLE 5. Accuracy Of Single-Run Double-Stranded Automated Sequencing

<u>Bases from Primer</u>	<u>Mismatches/ Ambiguities</u> ⁺	<u>Gaps Insertions</u> ⁺	<u>Percent Deletions</u> ⁺	<u>Aligned Accurate</u>	<u>Bases</u>
101 - 200	1.45	0.18	0.19	98.2	8,800
201 - 300	1.72	0.25	0.11	97.9	8,130
301 - 400	2.07	0.98	0.37	96.6	5,404
>400	3.53	2.63	1.06	92.8	3,197

ESTs statistically identical to known human sequences and those matching mitochondrial and ribosomal genes were aligned with sequenced from GenBank using the GCG program BESTFIT. The first 85 nucleotides was polylinker sequence which was not aligned with the pBluescript SK reference sequence. Tabulation of errors began 15 bases into the BESTFIT alignment and thus is reported beginning with bases 101-200. ⁺Error rates are reported as number of mismatches, insertions, or deletions per hundred aligned bases. "Mismatches" includes ambiguous base calls.

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The number of mismatches, insertions and deletions was counted for each hundred bases of the sequence (Table 5). As expected, the sequence quality was best closest to the primer and decreased rapidly after about 400 bases. The number of deletions and insertions relative to the GenBank reference sequence increased five- to ten-fold beyond 400 bases, while the number of mismatches doubled. The average accuracy rate for individual double-stranded sequencing runs was 97.7% to 400 bases.

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The resulting metaphase chromosomes had fluorescent tags localized to those regions of the chromosome that were homologous to the EST. Thus, a particular EST was localized to a particular region on a given chromosome. In this manner, SEQ ID NOS 396, 485, 506, 1880 and 1894 were mapped using fluorescent in situ hybridization to locations on chromosomes 17, 7, 10 and 1 respectively (See Table 4B below). For a review of the technique see Verma et al., *Human Chromosomes: A Manual of Basic Techniques*. Pergamon Press, NY (1988), which is hereby incorporated by reference.

Table 4: Precise Chromosomal Localization of ESTs

	SEQ ID	EST#	Map Location
	-----	-----	-----
15	A.	19	EST00023 6p
		22	EST00301 6p
		1894	EST01643 6p21
		1	EST00007 6q
		224	EST00356 6q
		288	EST00219 6q
20		162	EST00133 Xp11.21 - Xp21.2
		1917	EST01029 Xp11.21 - Xp21.2
		1669	EST00827 Xq26 - Xq27.1
		1899	EST01014 Xq28
25	B.	1880	EST01634 1q32
		485	EST01466 7p13
		506	EST01471 10q11.2
		396	EST01443 17q25

EXAMPLE 8

Automated DNA Sequencing Accuracy

ESTs that match human sequences in GenBank are excellent tools for the analysis of the accuracy of double-strand automated DNA sequencing. Ninety EST/GenBank matches were examined for the number of nucleotide mismatches and gaps required to achieve optimal alignment by the Genetics Computer Group (GCG) program BESTFIT (Devereux et al, *Nucleic Acids Research* 12: 387 (1984)).

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J. 5: 12-20 (1991)). Mapped ESTs are also a new resource to identify candidates for the estimated 5000 single-locus disease-associated genes (Id.).

EXAMPLE 7

5 Alternative Technique for Mapping to Chromosomes
 Mapping of ESTs to chromosomes using fluorescence in situ
 hybridization

10 This technique was used to map an EST to a particular location on a given chromosome. Cell cultures, tissue, or whole blood were used to obtain chromosomes.

 0.5 ml. of whole blood was added to RPMI 1640 and incubated 96 hours in a 5%CO₂/37°C incubator. 0.05 ug/ml colcemide was added to the culture one hour before harvest. Cells were collected and washed in PBS. The suspension was
15 incubated with a hypotonic solution of KCl added dropwise to reach a final volume of 5 ml. The cells were spun down and fixed by resuspending the cells in methanol and glacial acetic acid (3:1). The cell suspension was dropped onto glass slides and dried.

20 The slides were treated with RNase A and washed then dehydrated in a series of increasing concentrations of ethanol.

 The EST to be localized was nick-translated using fluorescently labeled nucleotide (Korenberg, Jr., et al.,
25 Cell 53(3):391-400 (1988)). Following nick translation, unincorporated label was removed by spin dialysis through Sepharose. The probe was further extracted with phenol-chloroform to remove additional protein. The chromosomes were denatured in formamide using techniques known in the art and the denatured probe was added to the slides. Following
30 hybridization, the cells were washed. The slides were studied under a fluorescent microscope. In addition, the chromosomes can be stained for G-banding or Q-banding using techniques known in the art.

The foregoing techniques have been used to further localize 9 ESTs and their associated genes to precise locations onto chromosome 6 or chromosome X, as reflected in Table 4A (in Example 7 below), using sublocalization techniques that employ somatic cell hybrids. ESTs were used as hybridization probes and mapped to other chromosomes using techniques disclosed in Example 7. Somatic cell hybrids were prepared that contained defined subsets of chromosomes 6 and X. Methods for preparing and selecting somatic cell hybrids are known in the art. For a review of an exemplary procedure to generate somatic cell hybrids containing the short arm of human chromosome 6, see Zoghbi, et al., *Genomics* 9(4):713-720 (1991). For a general review of somatic cell hybridization see Ledbetter et al. (*supra*). The hybrids were processed to obtain DNA and analyzed by PCR and by fluorescence in situ hybridization. SEQ ID NOs 19, 22, 1, 224, 288 mapped to chromosome 6, while SEQ ID NOs 162, 1917, 1699 and 1899 mapped to chromosome X using somatic cell hybrids.

EXAMPLE 6

Mapping of All ESTs to Human Chromosomes

The procedure of Example 5 is repeated for all of the ESTs from Examples 1 and 2 not previously mapped to human chromosomes. Data are generated corresponding to the data in Table 3 for all of the unmapped ESTs. As previously mentioned, virtually all of the ESTs will map to a unique chromosomal location. The inability of any ESTs to localize to a unique location will be readily ascertainable during the mapping process.

Physical mapping of the type reported in Table 4 on all the EST clones reported here would provide human chromosome markers spaced on average every 1.2 megabases and would roughly double the number of expressed sequences that have been localized to chromosomes (McKusick, V. *FASEB*

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<u>SEQ ID</u>	<u>EST#</u>	<u>Chr</u>	<u>PRIMER #1</u>	<u>PRIMER #2</u>
162	EST00133	X	ATGTGAGCATCTATACCTGC	AATGAAGGCATGAGAATAGG
1669	EST00827	X	CGGACAACCTAGGATAAATGC	TACGCGTTTGAATGGCTTGA
1917	EST01029	X	GAATAGCATTATTAGCCAGT	GGACCTATTGGAGATCTACT
1708	EST00858	X	AL2-AAGGCGAGGATTATGTGC	TTCTACTGGGTACACTTCGACC

Abbreviation: AL2: Amino-Link-2 Fluorescent Tag, Chr.: Chromosome.

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SEO ID	EST#	Chr	PRIMER #1	PRIMER #2
1	EST00007	6	TAGTTGATGGTCTGGGTTAT	GAAATCCCAGGGAGACAATG
19	EST00023	6	CAACTTACATTAGGGGTTTG	GACCTCATTAGAAGAGCCCA
155	EST00129	6	GGAAGCTGCCATATAAGCTC	TCAGTGTCTGTAATCTACC
224	EST00356	6	GCTGTATGTTAACCCTTTGT	TGGAACCCCTCAAACACTGCT
288	EST00219	6	ACTTTTCATGTTGAGAAGTAT	ATCTAGCTGAAACATTGCTG
1638	EST00798	6	CTTCATCTGTTAACTGTTGA	TGAAAAATGAGTCACAGGCAG
1675	EST00833	6	AL2 - ACCCAGTTCTCAAAGACC	GGTTTACCATTACAGAGGC
22	EST00301	6	CTCCGTGATTACCTTCATCT	TTGTAGGTATCTCTGTCTAGCT
207	EST00167	7	GGTGCTACTTTGTGAATGCT	AGCAATGTGATTTTGTAGG
137	EST00272	7	AGTGGTCACTATCTACATGG	GATTCAGAATTACTAAGCCG
1659	EST00817	7	TGTATAGGCTCTACATAAAG	CTTAATCATGGATTCTTCGT
1680	EST00838	7	AL2 - GTTCTTTCCAGGTATGC	TTGTTGGTACTGAGGAAAGTGCG
292	EST00223	8	TGCAGCAGTGACCATGAGAA	ATCATCTTTCCACGCGGCTT
134	EST00375	9	TCTGGGCTTCTGTGGTTCAA	CTGGCTGCTCAGCAACTCAT
1906	EST01021	9	GGATGTTTTCTATGTGACGA	TTCCAGTGCCCTTTTGTCC
1645	EST00804	10	CTCCTTTGGGACAAACAAC	CCAACCCAAACATATTCTA
20	EST00024	10	AGCTGTTCCCTGAGAGATGCA	CCTTGTAAGAAAGACTTTC
157	EST00131	10	TCAGCAACAGGTCACTTTGG	CTAAGCATCTGCATGTCCAG
172	EST00142	10	TACTAGCATTCTTACTCTC	TATGCTGATTGTTTGCACCTC
250	EST00197	10	GGTGATTAGAGAGTCTGTTG	GAACCTCTGTAGTGTCTAAA
133	EST00111	11	GGAAATTAGGCTTAGCTCAC	GTGCAGAATACTTAGAGTCC
178	EST00294	11	GTTTGAAGGAAGTGATTTC	TAGGGCCACCTCCAGTTCAT
10	EST00016	11	GTCTTTGGATTCTACGTAGA	CGATAATGACATTTCTCTGG
126	EST00109	11	AL2 - CTAACCACAACCCACACATTG	CCTCAGCACAAGAGAAGATGG
7	EST00014	12	AACCTTGCAACATAAATAC	GAGCAATGATTTCTAACAGT
254	EST00200	13	TTGTGTACTGTCTGATAGAC	TAAGCCATGGGCATCTATAA
2409	EST00273	13	GCAAGATGATGGAACATCCC	TTCCCTTCTGGAGGCTCTACA
170	EST00295	14	GGTGCTTAAGGCCACTTTTG	CTTAGAGGATCATAGGTCTG
255	EST00201	14	CCAGGAGAGTAAGAAGATCA	GCAGAGTTGAATATGAACCT
290	EST00221	14	GTGCCAAGATGGCTCATGTA	GTATAGCTTTAAGCCAGTTC
293	EST00224	14	AATGCATTATGCCTGGTCTT	GGAAAAGTCTAGAACTTAGT
1664	EST00822	14	GGGTCAGAATTAAGAGGTCT	GTTTCATCTCTAACTCCTTTC
315	EST00008	14	AAGCTGGCTGGGAAATGTTT	GTCATGCTAGTAACTTACAC
1689	EST00845	14	AL2 - AGGAGGAAGCTGAAATCC	GGAAAGTCCATAAGAGACTCACC
95	EST00088	15	GTGACAGACCATGTCTATTG	AAGTGAGCGATTGCACCTTC
205	EST00165	15	AGGATGACCTGAGTGAGCTG	CCATGGCAGCAAGGAACCTC
33	EST00034	16	TGTGTGAAAGGGAGTCTTGT	CCATTTTGACTGTTCCATAG
247	EST00279	16	TGGCTAGGGCAGGCCTTAAA	GAGAAGAATATCAAATGGGG
18	EST00373	16	CCATCTGTGTCCCAATTAAGC	AGGGAAGAAGTCTAGAGCGA
68	EST00068	17	CAAAGACGGGAGACGAATGA	AGTGGAAACGGTGGCCATG
1652	EST00811	17	GAGCTGCATGTTGATAAGTA	TTGACTTAAGCTGACCTTAA
1702	EST00854	17	AL2 - TTGCTGTGGAATCCATGAGAG	GGCAAGTGATCTGTTCTTGG
84	EST00080	19	AGAGATGTCAGTCCATTATC	CTATTCCACCTTACTCAAGG
223	EST00368	19	CATCATGTCCGAGACGCATT	TGGATGACCTGAGTCTGCAG
21	EST00025	20	AGTTCTGGAGGCTAGGAGTT	ATGTAAGGACCCCTAGATGG
210	EST00168	20	TGTCAACTTCCCTTTGGCCT	GAAGCTTGCTCATTACAGGAA
136	EST00113	20	AL2 - TCGGAGAAGTTGCAGTTCTG	GTTAAAGCTGTTAGACGGGGC
120	EST00103	22	CACTGACTGACTCCTCTTTA	GGAACCGTAACCTCTCCATAG
313	EST00276	X	ATTGACCTTCAATGTAATAA	TTGGATTGGGGCAAAATAG

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Table 3: Assignment of ESTs to Chromosomes by PCR

SEQ ID	EST#	Chr	PRIMER #1	PRIMER #2
5	EST00012	1	TCCAGGCAATCCCAGAATAG	CTAATTGAGCTCACTGGCCC
57	EST00058	1	CTGTTTGCAAGTTTCAAAGC	GCCATTTCTAACAACCAGAG
64	EST00066	1	GCCATTGTGCTGAATAGAGT	GTTAGTGTTCCTTAGCAAG
83	EST00079	1	CAGCTAATTGACCTGGGCTA	CAACATGCTCTGAGCTTTAG
83	EST00079	1	GGCAGAGCATAATGAGTATA	CATATGCATATGGTCCCTAT
91	EST00086	1	AGTTTATGATGGAGGGCTGTC	TCTGCCCTAATGCGCAGGCT
105	EST00365	1	CTTAATCACCTCCCCTTTTGT	CCTTAGTTGGAGATAAGGTC
109	EST00095	1	AGTCTAATCCTGTACACTTG	CGGGCTTTCTCTGAATTGGT
116	EST00100	1	TTAGAAGTGCCCATGGGAGG	TTTAAAGGCTCTGGAGTGTT
141	EST00118	1	CTCAGAGAACTTATAGTGAA	CTACAGAATCATTTACCAG
220	EST00372	1	AAGTTGCACATTGCCCAAGG	ATAGTACTGCAAGGTTATTC
237	EST00187	1	TTACAAATTTCTCTTGACGC	CTGAAGGAGCACAGTTTCTC
242	EST00192	1	GGATCAGATAATCAAACAGG	GCTTAGGATATGAATGCATA
259	EST00202	1	GCATCACAGTTTAACTGAGG	CTACATATTTGTGCCTCCTT
269	EST00293	1	CTGTTGCTGTGCAGTAGCTT	CTTTTGACCCAGTGAACTT
299	EST00249	1	GATCATGCAGACGTAGATAT	CCAATCCTGCCAGATCATT
1651	EST00810	1	TAGTCGCTGTAAGTTGATTC	GCTTTGCTGGATGCTTCATT
16	EST00021	2	CAGGCAAGTTTCTTCCAGGA	TCAGACCCATGGTCAGCTT
1898	EST01013	2	GGCTGAGAACGGTTAGCATA	CCCTCAGCTTAGGGGAATG
8	EST00234	2	TAGAAGGCAAACTATGTCCC	GGTTGAGGATTGGCTTTTAC
36	EST00037	2	AGCCAGAAGGCTGTAAAG	GCAGTGAACCACTACTCCTA
123	EST00106	2	GTCTAATTTGTAACCTTCAG	GATAGATTGTATAAGAAGCC
192	EST00155	2	GATTTATGTCTGGGAATAA	GCAGCATGTGAAAGAATGAT
200	EST00162	2	TTTAATGGGTGGTGGGAGCT	CGATGCACATCCTTCTCCAT
284	EST00216	2	CCTAAGAATTCGTTTGGCTC	GTCTGGCACATAATAGATTTG
102	EST00248	3	ATACTACATCTAGTCTGG	TTACAGTTCTGTGGTTTTT
167	EST00138	3	AAACAGCTCGCGAGTACA	AAAGGATCCTCCACTCCAGA
12	EST00274	3	CCTAGCAAACCTCATACACAC	CATAAGTGAATGGACACAGG
60	EST00062	3	ACACATTAACGGTGCTGCAG	GGAATCAGCCCTTGAGGACT
77	EST00257	3	AAGCTCACAAACGCAGATCTG	CTGGAACAGCTTACAAAGGT
107	EST00093	3	ATTGAACCTCTGTCAACAGTG	TGTAAACAAAGGCCAAACT
108	EST00094	3	AL2 - GCAGGATGTCAGTCTTTGAG	AGCACACATTATCTACCACGGC
1706	EST00857	3	AL2 - GCAGGATGTCAGTCTTTGAG	CCAGCACACATTATCTACCACG
37	EST00038	4	AACTTCGCAGTCATGAGAAC	TGTATCGGGCAGTTCTCAG
6	EST00013	4	CACATGTTCTCCCTCTTTCA	GCATTTTGGAGCTCTTCCGT
37	EST00038	4	AL2 - GGAAGTACAGGATTTGGC	TTAGAGATGGGATGATGCCG
31	EST00033	5	TGGGTACCTAAGGTGTTTG	GACTAATCTAAGGTCTAGG
28	EST00030	5	AGATAAGTTAGGAAGCTGGT	ACTCACTGCTAGTATCATCC
59	EST00061	5	AAAGTTTCTTAGCACCCCCC	CAGACTTTGACAAAAGAATC
74	EST00073	5	ATCAGACACGTGGCAGGGTT	AAGTCCCTGAGGGTGCAGAA
121	EST00104	5	TGAAGGCAGCTGCTAAATCT	GGATGTATTGATCTGACTCA
149	EST00123	5	ATACTGTCAACGGAGGGTGA	GTCTGCAGGTTTCTCCTTGA
235	EST00185	5	TTACTGTCCCATCAGATATC	TACACTCTTAAGAAGGTATG
1643	EST00803	5	GAGCGTTTAAAAGAGATTCT	TACAGACAGCCATGTTCCAA
1677	EST00835	5	AL2 - TCTCCAACACAGTCATGC	CGGATGCCATCATATACC
23	EST00026	5	CCTGCAGTGACACTTAACAT	CTGCTCACCTGAAATTGATAC
121	EST00104	5	AL2 - CAGATCAATACATCCTCTGGG	CTGTGCAGTGGTGAGTAAAGG

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The assignment of 100 ESTs and corresponding genes to chromosomes by PCR is shown in Table 3.

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these regions are less likely to prime other members of a gene family or pseudogenes.

The primers were used in polymerase chain reactions (PCR) to amplify templates from total human genomic DNA. PCR conditions were as follows: 60 ng of genomic DNA was used as a template for PCR with 80 ng of each oligonucleotide primer, 0.6 unit of Tag polymerase, and 1 uCi of a ³²P-labeled deoxycytidine triphosphate. The PCR was performed in a microplate thermocycler (Techne) under the following conditions: 30 cycles of 94°C, 1.4 min; 55°C, 2 min; and 72°C, 2 min; with a final extension at 72°C for 10 min. The amplified products were analyzed on a 6% polyacrylamide sequencing gel and visualized by autoradiography. If the size of the resulting product was equivalent to the EST from which the primers are derived, then the PCR reaction was repeated with DNA templates from two panels of human-rodent somatic cell hybrids; BIOS PCRable DNA (BIOS Corporation) and NIGMS Human-Rodent Somatic Cell Hybrid Mapping Panel Number 1 (NIGMS, Camden, NJ).

PCR was used to screen a series of somatic cell hybrid cell lines containing defined sets of human chromosomes for the presence of a given EST. DNA was isolated from the somatic hybrids and used as starting templates for PCR reactions using the primer pairs from EST sequences selected above. Only those somatic cell hybrids with chromosomes containing the human gene corresponding to the EST will yield an amplified fragment. ESTs were assigned to a chromosome by analysis of the segregation pattern of PCR products from hybrid DNA templates. For a review of techniques and analysis of results from somatic cell gene mapping experiments. (See Ledbetter et al., *Genomics* 6:475-481 (1990).) The single human chromosome present in all cell hybrids that give rise to an amplified fragment represents the chromosome containing that EST.

sequences to minimize the chance of amplifying through an intron. The oligonucleotides were 18-23 bp in length and designed for PCR amplification using the computer program INTRON (National Institutes of Mental Health, Bethesda, MD). The program is based on the assumptions that: 1) introns are genomic sequences that interrupt the coding and noncoding sequences of genes (Smith, J. Mol. Evol. 27:45-55 (1988)); 2) there are consensus sequences for splice junctions (Shapiro, et al., Nucl. Acids Res. 15:7155-7174 (1987)); and 3) that 90% of the human genes studied have 3' untranslated regions of mRNA not interrupted by introns in the genomic DNA (Hawkins, Nucl. Acids Res. 16:9893-9908 (1988)).

The program evaluates the likelihood that a given GG or CC dinucleotide represents a former exon-intron boundary. Specifically, every input strand is processed by the INTRON program twice, first evaluating the sense mRNA strand, and then processing the complementary or anti-sense strand. The program evaluates each sequence by finding all GG or CC pairs (possible former splice sites), searching for STOP codons in all three reading frames, and analyzing the GG or CC pairs surrounded by stop codons. All regions of the EST that are unlikely to contain splice junctions based on CC content, GG content, and stop codon frequency are then marked by the program in uppercase.

The creation of PCR primers from known sequences is well known to those with skill in the art. For a review of PCR technology see Erlich, H.A., PCR Technology; Principles and Applications for DNA Amplification. 1992. W.H. Freeman and Co., New York. ESTs were examined for the presence of stop codons in each reading frame and for consensus splice junctions. The presence of stop codons and absence of splice junction sequences are more characteristic of 3' untranslated sequences than of introns. The untranslated sequences are unique to a given gene; thus, primers from

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There is little redundancy in EST sequencing according to the present invention. Of the nuclear-encoded messenger RNAs, the most common ESTs were to the β -actin (0.6% of the EST clones) and myelin basic protein genes (MBP, 0.5% of the clones). MBP, a highly expressed structural component of nerve tissue (Kamholtz, J., de Ferra, F., Puckett, C., & Lazzarini, R. *Proc. Natl. Acad. Sci., USA* 83: 4962-4966 (1986)), displays four alternate splicing forms, of which at least two are present among the ESTs reported here. Other common ESTs were Gs-alpha gamma-actin and both α - and α -tubulin.

By matching ESTs to known database sequences, a phenotypic characterization of the tissue begins to emerge. Protein superfamilies matched by ESTs were grouped into three broad functional categories to assess the biological spectrum represented by these randomly selected cDNA clones. Structural and metabolic classes comprised about 30% of the ESTs with database matches. Twenty-five percent were involved in regulatory pathways and the remainder were not classifiable. Eleven of the eighteen enzymes of glycolysis and the citric acid cycle are represented by at least one subunit or isozyme. In addition, several genes not previously known to be expressed in the brain were matched, including spermine/spermidine acetyltransferase (Casero, R., Celano, P., Ervin, S., Applegren, N., Wiest, L. & Pegg, A. *J. Biol. Chem.* 266: 810-814 (1991)) and osteopontin (Young, M., Kerr, J., Termine, J., Wewer, U., Wang, M., McBride, W. & Fisher, L. *Genomics* 7:491-502 (1990)).

EXAMPLE 5

Mapping of ESTs to Human Chromosomes

Randomly selected ESTs corresponding to SEQ ID NOs. were assigned to chromosomes via PCR (see Table 3). Oligonucleotide primer pairs were designed from EST

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1856	EST01627	Ribosomal protein L1a	A24579	PIR	75	63.1
1974	EST01667	Ribosomal protein L3	JQ0771	PIR	74	80.0
301	EST00300	Ribosomal protein L30	R6RT30	PIR	57	96.5
22	EST00301	Ribosomal protein S10	R3RT10	PIR	66	97.0
2402	EST01826	Ribosomal protein S10	R3YM10	PIR	36	51.4
463	EST01459	Ribosomal protein YL10	S11581	PIR	40	68.3
1408	EST02442	Seven in absentia	A36195	PIR	46	80.8
299	EST00249	smg p25A GDP dissociation inhibitor	A35652	PIR	97	77.5
951	EST01960	Spectrin, beta	HUMSPTB	GB	268	67.7
2089	EST01699	Sperm membrane protein	A35981	PIR	52	58.5
2073	EST01697	Succinate dehydrogenase flavoprotein	BOVSDHFP1_1	GPU	44	100.0
2138	EST01715	Succinate dehydrogenase flavoprotein	BOVSDHFP1_1	GPU	49	92.0
430	EST00472	Synaptotagmin (p65)	SY65\$HUMAN	SP	27	53.6
1371	EST02402	Talin	MUSTALINR_1	GPU	79	81.2
1771	EST01601	Thiosulfate sulfurtransferase (rhodanese)	ROBO	PIR	65	81.8
300	EST00232	Transforming protein (dbl)	TVHUDB	PIR	25	65.4
189	EST00282	trkB	A35104	PIR	33	67.6
653	EST01512	Tubulin, alpha	HUMTUBAG	GB	223	75.0
594	EST01490	Tubulin, beta	HUMTB85	GB	298	93.6
757	EST01542	Tubulin, beta	HUMTUBBM	GB	217	90.4
1245	EST02274	Tubulin, beta	A26561	PIR	105	88.7
1147	EST02169	Tyrosine kinase	HUMECK	GB	384	74.3
1701	EST00853	Unc-104	JN0114	NR	36	45.0
2121	EST01711	Valine-tRNA ligase	A29871	PIR	56	57.9
187	EST00152	Wilm's tumor-related protein	HUMQM	GB	228	99.6
1726	EST01588	XPR2 alkaline extracellular protease	B26955	PIR	88	46.1
249	EST00275	Zinc Finger Proteins	S06551	PIR	25	57.7
413	EST01446	Zinc Finger Proteins	S00754	PIR	45	60.9
469	EST01460	Zinc Finger Proteins	C32891	PIR	34	54.3
833	EST01560	Zinc Finger Proteins	S00754	PIR	105	67.0
1230	EST02259	Zinc finger proteins	S00754	PIR	71	62.5
1496	EST02534	Zinc finger proteins	A34612	PIR	50	45.1
2324	EST01352	Zinc Finger Proteins	S10397	PIR	29	56.7

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724	EST01529	Interferon-induced 54K protein	INI4\$HUMAN	SP	76	70.1
1035	EST02051	J1 protein	MUSJ1PRO	GB	362	85.7
1229	EST02258	KUP protein	HUMKUPMR_1	GPU	54	36.4
993	EST02007	Kinase 5 protein	CHKCEK5_1	GPU	68	94.2
77	EST00257	Kinesin	A35075	PIR	57	86.2
78	EST00258	Kinesin	A35075	PIR	62	47.6
2245	EST01748	Kinesin	A35075	PIR	98	52.5
2282	EST01764	Lamin B receptor	A36427	PIR	76	71.4
2173	EST01724	Lon protease	JO0901	PIR	103	41.3
1427	EST02463	Long-chain-fatty-acid-CoA ligase	A36275	PIR	36	62.2
313	EST00276	Lysosomal membrane glycoprotein 1 (LAMP-1)	A31959	PIR	53	46.3
161	EST00247	MARCKS (myristoylated alanine-rich protein kinase	BOVMARCKS	GB	139	83.6
1386	EST02418	MARCKS homolog	MMF52	EU	237	92.4
769	EST00734	MARCKS homolog	S08341	PIR	61	40.3
43	EST00371	Maternal G10 protein	S05955	PIR	38	92.3
1468	EST02505	Matrin 3	RATMATRIN3	GB	137	93.5
639	EST00632	Membrane transport superfamily (GTP-dependent)	A24400	PIR	63	39.1
1894	EST01643	Membrane transport superfamily (GTP-dependent)	A24400	PIR	71	50.0
824	EST01865	Microtubule-associated protein 1B	RATNEU	GB	293	86.4
223	EST00368	Microtubule-associated protein 1B	A33645	PIR	30	54.8
2032	EST01683	Microtubule-associated protein 1B	A33645	PIR	49	62.0
2017	EST01678	Milk fat globule membrane protein	A36479	PIR	48	61.2
1704	EST01580	Myeloid differentiation primary response gene MyD1	MUSMYD118_1	GPU	76	88.3
2226	EST01744	NAD(P)+ transhydrogenase (B-specific)	DEBOXM	PIR	86	93.1
1567	EST02610	Neural cell adhesion molecule L1	S05479	PIR	82	43.4
506	EST01471	Neurexin	S06017	PIR	120	84.3
1566	EST02609	Neutrophil oxidase factor	A34855	PIR	43	47.7
952	EST01961	Notch/Xotch	HUMTAN1_1	GPU	85	57.0
227	EST00259	Notch/Xotch	A35844	PIR	74	85.3
1395	EST02429	Nuclear factor 1-like protein (NF1)	HAMNF1A	GB	111	92.0
1681	EST01573	Nucleoside diphosphate kinase	A33386	PIR	71	52.8
346	EST01828	Otd homeotic protein	A35912	PIR	35	52.8
2254	EST01751	Phosphatidylinositol-4,5-bisphosphate phosphodiesterase	A28807	PIR	40	90.2
1869	EST00992	Polymyxin B resistance	A32714	PIR	20	76.2
93	EST00287	Processing enhancing protein	S03968	PIR	96	58.8
2353	EST01806	Prohibitin	RATPROHIB_1	GPU	120	97.5
2297	EST01775	Prohormone cleavage enzyme	MUSMPC1A_1	GPU	91	93.5
9	EST00376	Prolyl endopeptidase	PIGPREP	GB	223	83.9
1069	EST02087	Protein kinase C, zeta	HUMPKCL	GB	382	58.7
1933	EST01650	Protein phosphatase 2A beta subunit	HUMPROP2AB	GB	288	76.8
202	EST00298	Protein-tyrosine phosphatase LRP	LRP\$MOUSE	SP	62	44.4
1654	EST01572	Protochlorophyllide reductase	S04783	PIR	34	57.1
38	EST00374	RNA polymerase II 6th subunit (RPO26)	A36352	PIR	72	75.3
1478	EST02515	Rab5	F34323	PIR	91	82.6
2368	EST01389	Radial spoke protein 3	S05962	PIR	58	52.5
37	EST00038	ras p21-like small GTP-binding protein (smg GDS)	BOVSMGGDS	GB	131	89.4
180	EST00299	ras-related proteins	S10493	PIR	51	46.1
1700	EST01579	Retrovirus-related gag polyprotein	FOHUE2	PIR	95	77.1
1511	EST02550	Retrovirus-related pol polyprotein	GNLJGL	PIR	50	54.9
102	EST00248	rho H12/ ARH12	BOVBGBRH	GB	195	79.6
1715	EST01583	Ribosomal protein L18a	R5RT18	PIR	68	95.7
SEQ ID	EST#	Putative Identification	Accession	DB	Len	%ID

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Table 2: ESTs Identified by Database Matches

SEQ ID	EST#	Putative Identification	Accession	DB	Len	%ID
208	EST00250	60K filarial antigen	A28209	PIR	108	56.9
2320	EST01784	60K filarial antigen	A28209	PIR	88	50.6
969	EST01982	ADP-ribosylation factor 1	B33283	PIR	84	41.2
1834	EST01620	AMP deaminase, brain	A37056	PIR	57	100.0
97	EST00289	Aconitase	A35544	PIR	105	90.6
251	EST00370	Actin, other	S10021	PIR	44	51.1
248	EST00271	Actinin, alpha	HUMACTAR	GB	271	85.3
891	EST01891	Actinin, alpha	HUMACTAR	GB	315	81.6
1500	EST02538	Actinin, alpha	HUMACTAR	GB	271	75.0
132	EST00110	Agrin	RATAGR	GB	269	82.2
1852	EST01625	Agrin	RATAGR	GB	103	84.6
1094	EST02113	Ala	HUMALA	GB	92	82.8
691	EST00675	Alcohol dehydrogenase	RICGOS2G_1	GPU	38	59.0
2408	EST00244	Amyloid A4	HUMAFPA4	GB	135	91.9
1965	EST01664	Amyloid A4	A29030	PIR	52	54.7
2068	EST01694	Amyloid A4	QRHUA4	PIR	83	69.0
2092	EST01700	Anion exchanger homolog AE3	A33638	PIR	95	97.9
1880	EST01634	Axonal glycoprotein TAG-1	A34695	PIR	69	87.1
1492	EST02530	B cell-specific Mo-MLV integration site 1 (bmi-1)	MUSBMI1A	GB	111	87.5
1277	EST02306	Bib protein	S09699	PIR	57	53.4
13	EST00255	Cadherins	CADN\$HUMAN	SP	41	45.2
1348	EST02378	cAMP-dependent protein kinase inhibitor	MUSPKI	GB	234	91.5
1931	EST01041	cAMP-regulated phosphoprotein	B35308	PIR	21	86.4
1413	EST02447	cAMP-specific phosphodiesterase	HUMPDEAA	GB	363	69.0
396	EST01443	CDPdiacylglycerol-serine O-phosphatidyltransferase	JHO368	PIR	33	41.2
1956	EST01663	Ca2+-transporting ATPase 2	B28065	PIR	125	88.9
1126	EST02146	Calbindin D28	RATCALBD28	GB	81	87.8
1039	EST02055	Calcium channel	S05054	PIR	33	67.6
1910	EST01645	Calmodulin	RATRCM1	GB	120	90.1
485	EST01466	Calmodulin-dependent protein kinase, type II, beta	A26464	PIR	93	98.9
913	EST01913	Clathrin coat assembly protein AP50 homolog	YSCYAP54_1	GPU	62	63.5
2004	EST01676	Cofilin	PIGCOFIL	GB	132	89.5
2400	EST01824	Cysteine-rich intestinal protein	GYRTI	PIR	56	66.7
1588	EST02633	D22Z3 repetitive DNA	HUMREP	GB	160	76.4
2192	EST01257	Diacylglycerol kinase, lymphocyte	S09156	PIR	44	42.2
1441	EST02477	Diamine acetyltransferase	ATDA\$HUMAN	SP	74	45.3
650	EST00642	Dilute (myosin heavy chain)	MUSDILUTE_1	GPU	27	100.0
2302	EST01779	Discs-large tumor suppressor	DRODLGA_1	GPU	53	63.0
188	EST00256	Enhancer of split	A30047	PIR	86	58.6
2289	EST01325	Fatty acid synthase	RATFAS	GB	98	79.8
310	EST00377	Fo ATPase beta subunit, mitochondrial	BOVMTASB	GB	293	85.4
1332	EST02362	GA binding protein, beta subunit	MUSGAC_1	GPU	86	90.8
1667	EST00825	Gamma-aminobutyric acid transporter	A35918	PIR	26	59.3
2217	EST01738	Gelation factor ABP-280	A37098	PIR	74	80.0
1412	EST02446	Glutamate-aspartate carrier protein	JV0092	PIR	57	37.9
1020	EST02034	Glutaminase	GLS\$RAT	SP	34	74.3
1885	EST01639	Histocompatibility antigen modifier 1	A37779	PIR	63	75.0
1495	EST02533	Hypothetical 43.5K protein	JU0319	PIR	43	52.3
2326	EST01791	Inositol-1,4,5-trisphosphate 3-kinase	JN0129	PIR	65	68.2
SEQ ID	EST#	Putative Identification	Accession	DB	Len	%ID

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big-brain (bib) (Rao, Y., Jan, L., & Jan, Y. **Nature** 345: 163-167 (1990)), the discs tumor suppressor (Woods, D. & Bryant, P. **Cell** 66: 1-20 (1991)), and the homeotic gene orthodenticle (Finkelstein, R., Smouse, D. Capaci, T., Spradling, A. & Perrimon, N. **Genes. Dev.** 4: 1516-1527 (1990)). New members of gene families previously known in humans include a Ca^{+2} -transporting ATPase, an ADP ribosylation factor, and a new neural-cell adhesion molecule gene.

The 1971 ESTs without a putative identification were analyzed using the coding-region prediction program CRM via the GRAIL server (Uberbacher, E. & Mural, R. **Proc. Natl. Acad. Sci. USA** 88: 11261-5 (1991)). Fifteen percent of the unknown ESTs scored an excellent probability of containing protein-coding sequence. Fifty percent of the ESTs to known human genes contain protein-coding sequences, therefore, at most half of the unknown ESTs are likely to contain coding sequences. We have found no evidence that genomic DNA or cDNA to unspliced precursor RNA is a major contaminant of either the hippocampus or fetal brain library.

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actin (3), λ -actin (2), α -tubulin (2), α -2-macroglobulin (2), and 2'3'-cyclic-nucleotide-3'-phosphodiesterase (2). Those few instances where two or more ESTs represent different portions of a single cDNA can be readily ascertained when the sequence of the full cDNA insert is determined in accordance with Example 13.

Example 4

EST Sequences Characterization: Second Set

The ESTs of Example 2, including SEQ ID NOS 316-2407, were screened against known sequences listed in GenBank and other databases, as in Example 3. The results are reported in Table 2. The quality of the match is given as percent identity and length in base pairs for nucleotide matches and amino acid residues for peptide matches. In many cases ESTs match multiple domains on several related proteins; for example, EST00825 matches two transmembrane domains on both GABA and Norepinephrine transporters. Nucleotide databases are: GenBank (GB), and EMBL (E); peptide databases are: GenPept (GPU), Swiss-Prot (SP), and PIR.

The great majority (83%) of the partial cDNA sequences reported in Example 2 are unrelated to any sequences previously described in the literature. Based on database matches to known genes from humans as well as from such evolutionarily distant organisms as *E. coli*, yeast, *C. elegans*, *Drosophila*, barley, *Arabidopsis*, rice, and green algae, we have preliminarily identified the functional type of a number of the ESTs (Table 2). These include a novel gene similar to Notch/Tan-1 (Adams et al., *supra*), a new neurotransmitter transporter gene, and a new member of the multi-drug resistance gene family. Several genes involved in development or cell differentiation in *Drosophila* are represented by similar human ESTs, including seven in *absentia* (Carthew, R. & Rubin, G. Cell 63: 561-577 (1990)),

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EST00271 (SEQ ID NO:248) matched α -actinin with 85% identity at the nucleotide level.

Among the most interesting of the primary sequence relationships was the similarity of ESTs to the *Drosophila* genes Notch and Enhancer of split. Nucleotide and peptide alignments of EST00256 (SEQ ID NO:188) and EST00259 (SEQ ID NO:227) with the *Drosophila* genes have been demonstrated. Both genes are part of a signal cascade encoded by the "neurogenic" genes that are involved in the differentiation of neuronal and epidermal cell lineages in the neuroectoderm of the developing *Drosophila* embryo (Campos-Ortega, **Trends in Neuro. Sci.** 11: 400 (1988)). It has been proposed that the Enhancer of split protein interacts with a membrane protein that is the product of the Notch gene to convert a developmental signal into an altered pattern of gene expression (id. **J. Mol. Biol.** 215: 403 (1990)). EST00256 (SEQ ID NO:188) matches near the 5' end of the Enhancer of split coding sequence, away from the mammalian G protein β subunit- and yeast cdc4-like elements (Hartley et al, **Cell** 55: 785 (1988); Klambt et al. **EMBO J.** 8: 203 (1989)). Part of the EST00259 (SEQ ID NO:227) match to Notch in the cdc10/SW16 region that is similar to three cell-cycle control genes in yeast and is tightly conserved in the *Xenopus* Notch homolog, Xotch. In *Drosophila*, Enhancer of split is absolutely required for formation of epidermal tissue. Notch contains several epidermal growth factor-like repeats and appears to play a general role in cell-cell communication during development (Banerjee and Zipursky, **Neuron** 4:177 (1990)).

Seven genes were represented by more than one EST. Comparisons of all the ESTs against one another revealed two overlaps of unknown ESTs: EST00233 (SEQ ID NO:32) and EST00234 (SEQ ID NO:8) match in opposite orientations and EST00235 (SEQ ID NO:204) and EST00236 (SEQ ID NO:148) match in the same orientation beginning at the same nucleotide. Five human genes were represented by more than one EST: β -

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fodrin (non-erythroid spectrin). ESTs also document the presence in the hippocampus cDNA library of the ret proto-oncogene, the ras-related gene rhoB, and one of the chromosome 22 breakpoint cluster region transcripts. Eight ESTs are from genes known to be associated with genetic disorders (Online Mendelian Inheritance in Man). More than half of the human-matched ESTs from Example 1 have been mapped to chromosomes, indicating the bias of GenBank entries toward well-studied genes and proteins.

ESTs without significant GenBank matches were also compared to the ProSite database of recognized protein motifs. Not counting post-translational-modification signatures, fifty-four sequences contained motifs from the database. Some patterns, particularly the "leucine zipper", are found in scores or hundreds of proteins that do not share the functional property implied by the presence of the motif.

Similarities to sequences from other organisms were also detected in the BLAST searches of GenBank and PIR (Table 2). Several ESTs displayed similarity to "housekeeping" genes, including the ribosomal proteins S10 and L30 (rat) and the above glycolytic enzymes. EST00257 (SEQ ID NO:77) shows strong nucleotide sequence similarity to the squid (67%) and *Drosophila* (70.4%) kinesin heavy chain. Kinesin was first described as a microtubule-associated motor protein involved in organelle transport in the squid giant axon (Vale et al, *Cell* 42: 39 (1985)). Six oncogene-related sequences were also among the cDNA clones sequenced. EST00299 (SEQ ID NO:180) and EST00283 (SEQ ID NO:271) show similarity to several ras-related genes and EST00248 (SEQ ID NO:102) matched the 3' untranslated region of the bovine substrate of botulinum toxin ADP-ribosyltransferase. Similarities with an *S. cerevisiae* RNA polymerase subunit and Torpedo electromotor neuron-associated protein were also observed. Two ESTs may represent new members of known human gene families: EST00270 matched the three β -tubulin genes with 88-91% identity and

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After the BLASTN search, 30 unmatched ESTs were compared against GenBank by FASTA to determine if significant matches were missed due to the use of BLASTN for the database search. No additional statistically significant matches were found. Statistical significance does not necessarily mean functional similarity; some of the reported matches may indicate the presence of a conserved domain or motif or simply a common protein structure pattern. Those ESTs identified as fully corresponding to known human genes or proteins are not included in this disclosure. Statistically significant matches are reported in Table 2, together with the length and percent identity or similarity of each alignment.

On the basis of database searches, 609 EST sequences were classified into eight groups as shown in Table 1 (see Example 1 above). Four groups, with 197 or 32% of the sequences, consist of matches to human sequences: repetitive elements, mitochondrial genes, ribosomal RNA genes, and other nuclear genes. Forty-eight (8%) of the sequences matched non-human entries in GenBank or PIR while 230 (38%) had no significant matches. The remaining 134 (22%) sequences contained no insert or consisted entirely of polyA between the EcoRI cloning sites.

Thirty-six ESTs matched previously sequenced human nuclear genes with more than 97% identity. Four of these ESTs are from genes encoding enzymes involved in maintaining metabolic energy, including ADP/ATP translocase, aldolase C, hexokinase, and phosphoglycerate kinase. Human homologs of genes for the bovine mitochondrial ATP synthase $F_0\beta$ -subunit and porcine aconitase were also found (Table 2). Brain-specific cDNAs included synaptophysin, glial fibrillary acidic protein (GFAP), and neurofilament light chain. At least six ESTs are from genes encoding proteins involved in signal transduction: 2',3'-cyclic nucleotide 3'-phosphodiesterase (2 ESTs), calmodulin, c-erbA- α -2, $G_s\alpha$, and Na^+/K^+ ATPase α -subunit. Other ESTs were matches to genes for ubiquitous structural proteins -- actins, tubulins, and

EXAMPLE 3

EST Characterization: First Set

ESTs including SEQ ID NOs 1-315 were analyzed as follows. Initially, the EST sequences were examined for similarities in the GenBank nucleic acid database (GenBank Release 65.0), Protein Information Resource Release 26.0 (PIR), and ProSite (MacPattern from the EMBL data library, Fuchs R. *Comput. Appl. Biosci.* 7: 105 (1990) Release 5.0 were used). BLAST was used to search Genbank and the PIR (both maintained by the National Center for Biotechnology Information) ESTs without exact GenBank matches were translated in all six reading frames and each translation was compared with the protein sequence database PIR and the ProSite protein motif database. Comparisons with the ProSite motif database were done by means of the program MacPattern from the EMBL Data Library. GenBank and PIR searches were conducted with the "basic local alignment search tool" programs for nucleotide (BLASTN) and peptide (BLASTX) comparisons (Altschul et al, *J. Mol. Biol.* 215: 403 (1990)). PIR searches were run on the National Center for Biotechnology Information BLAST network service. The BLAST programs contain a very rapid database-searching algorithm that searches for local areas of similarity between two sequences and then extends the alignments on the basis of defined match and mismatch criteria. The algorithm does not consider the potential gaps to improve the alignment, thus sacrificing some sensitivity for a 6-80 fold increase in speed over other database-searching programs such as FASTA (Pegaron and Lipman, *Proc. Natl. Acad. Sci. USA*, 85: 2444 (1988)).

Sequence similarities identified by the BLAST programs were considered statistically significant with a Poisson P-value than 0.01. The Poisson P-value less than the probability of as high a score occurring by chance given the number of residues in the query sequence and the database.

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216: 1065-1070 (1982); Paulson, K. E., Deka, N., Schmid, C. W., Misra, R., Schlinder, C. W., Rush, M. G., Kadyk, L., & Leinwand, L. *Nature* 316: 359-361 (1985); Fanning, T. G. & Singer, M. F. *Biochem. Biophys. Acta* 910: 203-212 (1987))
5 were searched against all of GenBank and, in 6-frame translation, against a comprehensive, non-redundant peptide database using the network BLAST (Altschul, S. F., Gish, W., Miller, W., Myers, E.W., & Lipman, D. J. *Mol. Biol.* 215: 403-410 (1990)) server at the National Center for
10 Biotechnology Information. BLAST output was parsed, and an interactive alignment editor was used to select which matches, if any, from each search to record in a relational EST database, which was developed to track sequencing, identification, tissue localization, physical mapping, and
15 the public distribution of the clones, mapping and sequence data. For significant similarities, a putative gene name and Protein Identification Resource (PIR) gene family identification (Barker, W., George, D., Hunt, L., & Garavelli, J. *Nucl. Acids Res.* 19 (Suppl): 2231-2236 (1991))
20 for the EST were assigned. ESTs without significant matches using BLAST were searched in translation against PIR using FASTA. Ten additional marginal matches were found. A total of 2300 new EST sequences comprising 765,505 nucleotides from the current data set have been submitted to GenBank and
25 assigned accession numbers M77851-M79278 and M85308-M86179. All ESTs except those multiply representing actin, tubulin, and myelin basic protein clones were submitted. ATCC accession numbers of cDNA clones from which ESTs were derived are 77501-78999 and 81000-81756. The Genome Data Base
30 expressed D-segment numbers for these clones are D0S1E - D0S2422E. The ESTs from this Example are identified herein as SEQ ID NOS 316-2407.

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EXAMPLE 2

Sequencing of Additional ESTs: Second set

Over 2600 additional cDNA clones have been isolated, partially sequenced and screened. The clones were isolated from four human brain cDNA libraries. The new sequences thus discovered, together with the 315 brain ESTs from Example 1, correspond to over 2400 new human genes. These data represent an approximate doubling of the number of human genes identified by DNA sequencing.

Specifically, four cDNA libraries were used as sources of clones for sequencing. Human hippocampus and fetal brain libraries, plasmid template preparation, sequencing reactions, and automated sequencing were performed as described (Adams, M.D., Kelley, J.M., Gocayne, J.D., Dubnick, M., Polymeropoulos, M.H., Xiao, H., Merril, C.R., Wu, A., Olde, B., Moreno, R.F., Kerlavage, A.R., McCombie, W.R., & Venter, J.C. *Science*, 252: 1651-56 (1991)). A pooled probe consisting of inserts from 10 different EST clones with sequences that matched either mitochondrial genes or the 18S or 28S ribosomal RNAs was used to prescreen a gridded filter array of the hippocampus library; nonhybridizing clones are referred to as the "prescreened library". Another fetal brain library was constructed by and was a gift from Bento Soares (Columbia University). A directionally-cloned library was prepared using the method of Rubenstein, et al. (Rubenstein, J., Elizabeth, A., Brice, A., Ciaranello, R., Denney, D., Porteus, M. & Usdin, T. *Nucl. Acids Res.* 18: 4833-4842) using human adult brain mRNA purchased from Clontech (Palo Alto, CA; Catalogue # 6516-1). Of 482 clones analyzed by restriction enzyme digestion, 33% contained inserts at least 1500 base pairs in length. Stratagene hippocampus and fetal brain library totals include data from Adams et al *Science* 252: 1651.

Sequences of nuclear-encoded cDNAs that did not include interspersed repeats (Schmid, C. W. & Jelinek, W. R. *Science*

TABLE 1. cDNA Library Composition Determined
By Random Clone Sequencing

ESI Category	Hippocampus		Hippocampus Subtracted		Fetal Brain		Temporal Cortex	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Databases Match--Human	48	12.8	10	8.6	3	7.9	6	7.5
Mitochondrial Genes	39	10.4	14	12.2	6	15.8	0	0
Repeats: Alu, Line-1, etc.	10	2.7	7	6.0	0	0	11	13.8
Ribosomal RNA	32	8.6	7	6.0	4	10.5	0	0
Other Nuclear Genes	32	8.6	7	6.0	5	13.2	4	5.0
Database Match--Other	160	42.8	44	37.9	20	52.6	6	7.5
No Database Match	53	14.1	24	20.7	0	0	27	33.7
poly A Insert	1	0.3	3	2.6	0	0	26	32.5
No Insert								

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(1988)). Clones from this subtraction are listed in the column "Hippocampus Subtracted" in Table 1.

The EST sequences from this Example 1 are identified as SEQ ID NOS 1-315.

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universal or reverse primers. After a cycle sequencing protocol, carried out in a Perkin-Elmer thermal cycler, sequencing reactions were run on an Applied Biosystems, Inc. (Foster City, CA) 373A automated DNA sequencer. (Cycle sequencing was performed in a Perkin Elmer Thermal Cycler for 15 cycles of 95°C, 30 sec; 60°C, 1 sec; 70°C, 60 sec and 15 cycles of 95°C, 30 sec; 70°C, 60 sec with the Applied Biosystems, Inc. Taq Dye Primer Cycle Sequencing Core Kit protocol). Some sequencing reactions were performed on an ABI robotic workstation (Cathcart, *Nature* 347: 310 (1990) hereby incorporated by reference).

RESULTS:

Singe-run DNA sequence data were obtained from 609 randomly chosen cDNA clones. The number of clones sequenced from each library is summarized in Table 1. Double-stranded cDNA clones in the pBluescript vector were sequenced by a cycle sequencing protocol with dye-labeled primers and Applied Biosystems, Inc. 373A DNA Sequences. The average length of usable sequence was 397 bases with a standard deviation of 99 bases.

Subtractive hybridization has been used successfully to reduce the population of highly represented sequences in a cDNA library by selectively removing sequences shared by another library. (Schmid and Girou, *Neurochem.* 48: 307 (1987); Fargnoli et al, *Anal. Biochem.* 187: 364 (1990); Duguid and Dinauer, *Nucl. Acids. Res.* 18: 2789 (1990); Schweinfest, et al, *Genet. Anal. Techn. Appl.* 7: 64 (1990); Travis and Sutcliffe, *Proc. Natl. Acad. Sci. USA* 85: 1696 (1988); Kato, *Eur. J. Neurosci.* 2: 704 (1990)). Subtractive hybridization was therefore tested as a way of enhancing the number of brain-specific clones in the hippocampus library by hybridizing the hippocampus library with a WI38 human lung fibroblast cell line cDNA library and removing the common sequences (Schweinfest et al, *Genet. Anal. Techn. Appl.* 7: 64 (1990); Sive and St. John, *Nucl. Acids Res.* 16: 10937

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EXAMPLE 1

cDNA Sequences Determined by Random
Clone Selection: First set

5

METHODOLOGY:

With reference to the data presented in Table 1, lambda ZAP libraries were converted en masse to pBluescript plasmids, transfected into E. coli XL1-Blue cells, and plated on X-gal/IPTG/ampicillin plates. A total of 1058 clones were picked at random from three human brain cDNA libraries: fetal brain, two-year-old hippocampus, and two-year-old temporal cortex (Stratagene catalog #936206, 936205, 935, respectively. Stratagene, 11099 N. Torrey Pines Rd., La Jolla, CA 92037). An analysis of these clones is summarized in Table I (see below). In addition, clones selected from the hippocampus library were also analyzed after subtractive hybridization with the fibroblast library. These results are listed in the "Hippocampus Subtracted" column of Table 1.

Templates for DNA sequencing were PCR products or plasmids prepared by the alkaline lysis method. About half of the templates prepared by PCR failed to yield an amplified fragment suitable for sequencing. This was primarily due to use of PCR conditions that minimized the need for further purification of the product but also selected against amplification of long inserts (5 μ l fresh or frozen overnight culture of E. coli carrying the pBluescript plasmid, 7.5 μ M each dNTP, and 0.1 μ M each primer for 35 cycles: 94°C, 40 sec; 55°C, 40 sec; 72°C, 90 sec). A further percentage of the PCR-generated templates failed to sequence, largely due to primer-dimer or other amplification artifacts. Qiagen™ columns improved the percentage of plasmid templates, increasing the yields of usable sequence from about 60% with a standard alkaline lysis protocol to over 90%. Overall, 117 PCR-generated templates and 497 plasmid templates resulted in usable sequence. Dideoxy chain termination sequencing reactions were performed with fluorescent dye-labeled M13

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particularly useful in producing small peptides and fragments of larger polypeptides. (Fragments are useful, for example, in generating antibodies against the native polypeptide.)

Alternatively, the DNA encoding the desired polypeptide
5 can be inserted into a host organism and expressed. The organism can be a bacterium, yeast, cell line, or multicellular plant or animal. The literature is replete with examples of suitable host organisms and expression techniques. For example, naked polynucleotide (DNA or mRNA)
10 can be injected directly into muscle tissue of mammals, where it is expressed. This methodology can be used to deliver the polypeptide to the animal, or to generate an immune response against a foreign polypeptide. Wolff, et al., *Science* 247:1465 (1990); Felgner, et al., *Nature* 349:351 (1991).
15 Alternatively, the coding sequence, together with appropriate regulatory regions (i.e., a construct), can be inserted into a vector, which is then used to transfect a cell. The cell (which may or may not be part of a larger organism) then expresses the polypeptide. (See Example 25.)

20 Antibodies generated against the polypeptide corresponding to a sequence of the present invention can be obtained by direct injection of the naked polypeptide into an animal (as above) or by administering the polypeptide to an animal, preferably a nonhuman. The antibody so obtained will
25 then bind the polypeptide itself. In this manner, even a sequence encoding only a fragment of the polypeptide can be used to generate antibodies binding the whole native polypeptide. Such antibodies can then be used to isolate the polypeptide from tissue expressing that polypeptide.
30 Moreover, a panel of such antibodies, specific to a large number of polypeptides, can be used to identify and differentiate such tissue.

VI. Examples

35 Certain aspects of the present invention are described in greater detail in the non-limiting Examples that follow.

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(1992)). Once this specific area of the genome is amplified, it is digested with one or more restriction enzymes to yield an identifying set of bands on a Southern blot probed with DNA corresponding to the DQ α class II HLA gene.

5 The sequences of the present invention can be used to provide polynucleotide reagents specifically targeted to additional loci in the human genome, and can enhance the reliability of DNA-based forensic identifications. Those sequences targeted to noncoding regions (see, e.g., Tables 8
10 and 9) are particularly appropriate. As mentioned above, actual base sequence information can be used for identification as an accurate alternative to patterns formed by restriction enzyme generated fragments. Reagents for obtaining such sequence information are within the scope of
15 the present invention. Such reagents can comprise complete ESTs or corresponding coding regions, or fragments of either of at least 15 bp, preferably at least 18 bp.

There is also a need for reagents capable of identifying the source of a particular tissue. Such need arises, for
20 example, in forensics when presented with tissue of unknown origin. Appropriate reagents can comprise, for example, DNA probes or primers specific to particular tissue prepared from the ESTs or complete sequences of the present invention. Panels of such reagents can identify tissue by species and/or
25 by organ type. In a similar fashion, these reagents can be used to screen tissue culture for contamination.

V. Production of Polypeptide Corresponding to ESTs

30 As previously explained, each EST corresponds not only to a coding region, but also to a polypeptide. Once the coding sequence is known, or the gene is cloned which encodes the polypeptide, conventional techniques in molecular biology can be used to obtain the polypeptide.

35 At the simplest level, the amino acid sequence encoded by the polynucleotide sequence can be synthesized using commercially available peptide synthesizers. This is

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obtain such identification sequences from individuals and from tissue, as explained in Examples 12 - 14.

5 The EST sequences from Examples 1 and 2 and the complete sequences from Example 13 uniquely represent portions of the human genome. Allelic variation occurs to some degree in the coding regions of these sequences, and to a greater degree in the noncoding regions. It is estimated that allelic variation between individual humans occurs with a frequency of about once per each 500 bases. Each of the ESTs or complete coding sequences comprising a part of the present invention can, to some degree, be used as a standard against which DNA from an individual can be compared for identification purposes. Because greater numbers of polymorphisms occur in the noncoding regions, fewer sequences are necessary to differentiate individuals. The noncoding sequences of Table 9 for example, could comfortably provide positive individual identification with a panel of perhaps 100 to 1,000 primers which each yield a noncoding amplified sequence of 100 bp. If predicted coding sequences, such as those from Table 6, are used, a more appropriate number of primers for positive individual identification would be 500-2,000.

25 If a panel of reagents from ESTs or complete sequences of this invention is used to generate a unique ID database for an individual, those same reagents can later be used to identify tissue from that individual. Positive identification of that individual, living or dead can be made from extremely small tissue samples.

30 Another use for DNA-based identification techniques is in forensic biology. PCR technology can be used to amplify DNA sequences taken from very small biological samples such as tissues, e.g., hair or skin, or body fluids, e.g., blood, saliva, semen, etc. In one prior art technique, gene sequences are amplified at specific loci known to contain a large number of allelic variations, for example the DQ α class II HLA gene (Erlich, H., PCR Technology, Freeman and Co.

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The present invention is also useful tool in gene therapy, which requires isolation of the disease-associated gene in question as a prerequisite to the insertion of a normal gene into an organism to correct a genetic defect. 5 high specificity of the cDNA probes according to this invention have promise of targeting such gene locations in a highly accurate manner.

The sequences of the present invention, as broadly defined, are also useful for identification of individuals 10 from minute biological samples. The United States military, for example, is considering the use of restriction fragment length polymorphism (RFLP) for identification of its personnel. In this technique, an individual's genomic DNA is digested with one or more restriction enzymes, and probed on 15 a Southern blot to yield unique bands for identifying personnel. This method does not suffer from the current limitations of "Dog Tags" which can be lost, switched, or stolen, making positive identification difficult. The sequences of the present invention are useful as additional 20 DNA markers for RFLP.

However, RFLP is a pattern based technique, which does not directly focus on the actual DNA sequence of the individual. The sequences of the present invention can be used to provide an alternative technique that determines the 25 actual base-by-base DNA sequence of selected portions of an individual's genome. These sequences can be used to prepare PCR primers for amplifying and isolating such selected DNA. One can, for example, take an EST of the invention and prepare two PCR primers from the 5' and 3' ends of the EST. 30 These are used to amplify an individual's DNA, corresponding to the EST. The amplified DNA is sequenced.

Panels of corresponding DNA sequences from individuals, made this way, can provide unique individual identifications, as each individual will have a unique set of such DNA 35 sequences, due to allelic differences. The sequences of the present invention can be used to particular advantage to

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the mutation is likely to be the causative agent of the disease.

With current resolution of physical mapping and genetic mapping techniques, a cDNA precisely localized to a chromosomal region associated with the disease could be one of between 50 and 500 potential causative genes. (This assumes 1 megabase mapping resolution and one gene per 20 kb.)

Comparison of affected and unaffected individuals generally involves first looking for structural alterations in the chromosomes, such as deletions or translocations that are visible from chromosome spreads or detectable using PCR based on that cDNA sequence. Ultimately, complete sequencing of genes from several individuals is required to confirm the presence of a mutation and to distinguish mutations from polymorphisms.

In addition to the foregoing, the sequences of the invention, as broadly described, can be used to control gene expression through triple helix formation or antisense DNA or RNA, both of which methods are based on binding of a polynucleotide sequence to DNA or RNA. Polynucleotides suitable for use in these methods are usually 20 to 40 bases in length and are designed to be complementary to a region of the gene involved in transcription (triple helix - see Lee et al, *Nucl. Acids Res.* 6: 3073 (1979); Cooney et al, *Science* 241: 456 (1988); and Dervan et al, *Science* 251: 1360 (1991)) or to the mRNA itself (antisense - Okano, *J. Neurochem.* 56: 560 (1991); *Oligodeoxynucleotides as Antisense Inhibitors of Gene Expression*, CRC Press, Boca Raton, FL (1988)). Triple helix formation optimally results in a shut-off of RNA transcription from DNA, while antisense RNA hybridization blocks translation of an mRNA molecule into polypeptide. Both techniques have been demonstrated to be efficient in model systems. Information contained in the sequences of the present invention is necessary for the design of an antisense or triple helix oligonucleotide.

Fluorescence in situ hybridization (FISH) of a cDNA clone to a metaphase chromosomal spread can be used to provide a precise chromosomal location in one step. This technique can be used with cDNA as short as 500 or 600 bases; however, clones larger than 2,000 bp have a higher likelihood of binding to a unique chromosomal location with sufficient signal intensity for simple detection. FISH requires use of the clone from which the EST was derived, and the longer the better. 2,000 bp is good, 4,000 is better, and more than 4,000 is probably not necessary to get good results a reasonable percentage of the time. For a review of this technique, see Verma et al., **Human Chromosomes: a Manual of Basic Techniques**. Pergamon Press, New York (1988).

Reagents for chromosome mapping can be used individually (to mark a single chromosome or a single site on that chromosome) or as panels of reagents (for marking multiple sites and/or multiple chromosomes). Reagents corresponding to noncoding regions of the genes actually are preferred for mapping purposes. Coding sequences are more likely to be conserved within gene families, thus increasing the chance of cross hybridizations during chromosomal mapping (see Tables 8 and 9).

Once a sequence has been mapped to a precise chromosomal location, the physical position of the sequence on the chromosome can be correlated with genetic map data. (Such data are found, for example, in V. McKusick, **Mendelian Inheritance in Man** (available on line through Johns Hopkins University Welch Medical Library).) The relationship between genes and diseases that have been mapped to the same chromosomal region are then identified through linkage analysis (coinheritance of physically adjacent genes).

Next, it is necessary to determine the differences in the cDNA or genomic sequence between affected and unaffected individuals. If a mutation is observed in some or all of the affected individuals but not in any normal individuals, then

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Each sequence is specifically targeted to and can hybridize with a particular location on an individual human chromosome. Moreover, there is a current need for identifying particular sites on the chromosome. Few chromosome marking reagents based on actual sequence data (repeat polymorphisms) are presently available for marking chromosomal location. The present invention constitutes a major expansion of available chromosome markers. One hundred ESTs have already been mapped to chromosomes. Using the techniques described in Example 5 or 6, the remaining ESTs and the corresponding complete sequences can similarly be mapped to chromosomes. The mapping of ESTs and cDNAs to chromosomes according to the present invention is an important first step in correlating those sequences with genes associated with disease.

Briefly, sequences can be mapped to chromosomes by preparing PCR primers (preferably 15-25 bp) from the ESTs. Computer analysis of the ESTs is used to rapidly select primers that do not span more than one exon in the genomic DNA, thus complicating the amplification process. These primers are then used for PCR screening of somatic cell hybrids containing individual human chromosomes. Only those hybrids containing the human gene corresponding to the EST will yield an amplified fragment.

PCR mapping of somatic cell hybrids is a rapid procedure for assigning a particular EST to a particular chromosome. Three or more clones can be assigned per day using a single thermal cycler. Using the present invention with the same oligonucleotide primers, sublocalization can be achieved with panels of fragments from specific chromosomes or pools of large genomic clones in an analogous manner. Other mapping strategies that can similarly be used to map an EST to its chromosome include in situ hybridization, prescreening with labeled flow-sorted chromosomes and preselection by hybridization to construct chromosome specific cDNA libraries. Results of mapping ESTs to chromosomal segments are listed in Tables 3 and 4.

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can be synthetically produced by conventional peptide synthesizers.

Certain ESTs have already been preliminarily categorized by analogy to related sequences in other organisms (see Table 2). Table 10 of Example 10 categorizes particular ESTs broadly as metabolic, regulatory, and structural sequences where known. Constructs comprising genes or coding sequences corresponding to each of these categories are, therefore, specifically and individually contemplated.

Table 11 more particularly separates 127 new ESTs into 13 categories using a different criteria. These are genes related to cell surface; developmental control; energy metabolism; kinase and phosphatase; oncogenes; other metabolism-related polypeptides; peptidases and peptidase inhibitors; receptors; structural and cytoskeletal; signal transduction; transporters; transcription, translation, and subcellular localization; and transcription factors. Table 11 further identifies the EST by the particular gene product for which it apparently codes. Each of these categories individually comprises a preferred category of EST, and preferred constructs and resulting polypeptide can be prepared from those ESTs or the corresponding complete gene sequence.

IV. ESTs and Corresponding Sequences as Reagents

Each of the cDNA sequences identified herein (and the corresponding complete gene sequences) can be used in numerous ways as polynucleotide reagents. The sequences can be used as diagnostic probes for the presence of a specific mRNA in a particular cell type. In addition, these sequences can be used as diagnostic probes suitable for use in genetic linkage analysis (polymorphisms). Further, the sequences can be used as probes for locating gene regions associated with genetic disease, as explained in more detail below.

The EST and complete gene sequences of the present invention are also valuable for chromosome identification.

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a plasmid or viral vector, into which a sequence of the invention has been inserted, in a sense or antisense orientation. In a preferred aspect of this embodiment, the construct further comprises regulatory sequences, including
5 for example, a promoter, operably linked to the sequence. Large numbers of suitable vectors and promoters are known to those of skill in the art, and are commercially available. The following vectors are provided by way of example.

Bacterial: pBs, phagescript, ϕ X174, pBluescript SK, pBs KS,
10 pNH8a, pNH16a, pNH18a, pNH46a (Stratagene); pTrc99A, pKK223-3, pKK233-3, pDR540, pRIT5 (Pharmacia).

Eukaryotic: pWLneo, pSV2cat, pOG44, pXT1, pSG (Stratagene);
pSVK3, pBPV, pMSG, pSVL (Pharmacia).

Promoter regions can be selected from any desired gene
15 using CAT (chloramphenicol transferase) vectors or other vectors with selectable markers. Two appropriate vectors are pKK232-8 and pCM7. Particular named bacterial promoters include lacI, lacZ, T3, T7, gpt, lambda P_R, and trc. Eukaryotic promoters include CMV immediate early, HSV
20 thymidine kinase, early and late SV40, LTRs from retrovirus, and mouse metallothionein-I. Selection of the appropriate vector and promoter is well within the level of ordinary skill in the art.

In a further embodiment, the present invention relates
25 to host cells containing the above-described construct. The host cell can be a higher eukaryotic cell, such as a mammalian cell, or a lower eukaryotic cell, such as a yeast cell, or the host cell can be a procaryotic cell, such as a bacterial cell. Introduction of the construct into the host
30 cell can be effected by calcium phosphate transfection, DEAE dextran mediated transfection, or electroporation (Davis, L., Dibner, M., Battey, I., **Basic Methods in Molecular Biology**, (1986)).

The constructs in host cells can be used in a
35 conventional manner to produce the gene product coded by the recombinant sequence. Alternatively, the encoded polypeptide

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natural material to at least one order of magnitude, preferably two or three orders, and more preferably four or five orders of magnitude is expressly contemplated.

5 In a cDNA library there are many species of mRNA represented. Each cDNA clone can be interesting in its own right, but must be isolated from the library before further experimentation can be completed. In order to sequence any specific cDNA, it must be removed and separated (i.e. isolated and purified) from all the other sequences. This
10 can be accomplished by many techniques known to those of skill in the art. These procedures normally involve identification of a bacterial colony containing the cDNA of interest and further amplification of that bacteria. Once a cDNA is separated from the mixed clone library, it can be
15 used as a template for further procedures such as nucleotide sequencing.

Although claims to large numbers of ESTs and corresponding sequences are presented herein, the invention is not limited to these particular groupings of sequences.
20 Thus, individual sequences are considered as applicants' discoveries or inventions, as are subgroupings of sequences. All of the functional subgroupings set forth in the tables define groupings for which separate claims are contemplated as being within the scope of this invention. Moreover, in
25 addition to claims to individual clones, it is intended that the present disclosure also support claims to numerical subgroupings. Thus, subgroupings of 50 ESTs (and corresponding sequences) are contemplated (e.g., SEQ ID NOS 1-50, 51-100, 101-150, etc.) as being within the scope of
30 this invention, as are subgroupings of 5, 10, 25, 100, 200, and 500 ESTs and corresponding sequences.

III. DNA Constructs

35 The present invention also includes recombinant constructs comprising one or more of the sequences as broadly described above. The constructs comprise a vector, such as

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The sequences, constructs, vectors, clones, and other materials comprising the present invention can advantageously be in enriched or isolated form. As used herein, "enriched" means that the concentration of the material is at least about 2, 5, 10, 100, or 1000 times its natural concentration (for example), advantageously 0.01%, by weight, preferably at least about 0.1% by weight. Enriched preparations of about 0.5%, 1%, 5%, 10%, and 20% by weight are also contemplated. Further, removal of clones corresponding to ribosomal RNA and "housekeeping" genes and clones without human cDNA inserts results in a library that is "enriched" in the desired clones.

The term "isolated" requires that the material be removed from its original environment (e.g., the natural environment if it is naturally occurring). For example, a naturally-occurring polynucleotide present in a living animal is not isolated, but the same polynucleotide, separated from some or all of the coexisting materials in the natural system, is isolated.

It is also advantageous that the sequences be in purified form. The term "purified" does not require absolute purity; rather, it is intended as a relative definition. Individual EST clones isolated from a cDNA library have been conventionally purified to electrophoretic homogeneity. The sequences obtained from these clones could not be obtained directly either from the library or from total human DNA. The cDNA clones are not naturally occurring as such, but rather are obtained via manipulation of a partially purified naturally occurring substance (messenger RNA). The conversion of mRNA into a cDNA library involves the creation of a synthetic substance (cDNA) and pure individual cDNA clones can be isolated from the synthetic library by clonal selection. Thus, creating a cDNA library from messenger RNA and subsequently isolating individual clones from that library results in an approximately 10^6 -fold purification of the native message. Purification of starting material or

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Gocayne, J.D., Ward, D.C., and Venter, J.C. *Genomics* 10: 985-995 (1991). Although the process is much more laborious, these genomic clones can be sequenced in their entirety also. A shotgun approach is preferred to sequencing clones with inserts longer than 10 kb (genomic cosmid and lambda clones). In shotgun sequencing, the clone is randomly broken into many small pieces, each of which is partially sequenced. The sequence fragments are then aligned to produce the final contiguous sequence with high redundancy. An intermediate approach is to sequence just the promoter region and the intron-exon boundaries and to estimate the size of the introns by restriction endonuclease digestion (ibid.).

Using the sequence information provided herein, the polynucleotides of the present invention can be derived from natural sources or synthesized using known methods. The sequences falling within the scope of the present invention are not limited to the specific sequences described, but include human allelic and species variations thereof and portions thereof of at least 15-18 bases. (Sequences of at least 15-18 bases can be used, for example, as PCR primers or as DNA probes.) In addition, the invention includes the entire coding sequence associated with the specific polynucleotide sequence of bases described in the Sequence Listing, as well as portions of the entire coding sequence of at least 15-18 bases and allelic and species variations thereof. Furthermore, to accommodate codon variability, the invention includes sequences coding for the same amino acid sequences as do the specific sequences disclosed herein. Finally, although the error rate in the automated sequencing used in the present invention is small, there remains some chance of error. Therefore, claims to particular sequences should not be so narrowly construed as to require inclusion of erroneously identified bases or to exclude corrections.

Any specific sequence disclosed herein can be readily screened for errors by resequencing each EST in both directions (i.e., sequence both strands of cDNA).

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the hybridization and washing stringencies necessary for accurate clone identification. The resulting autoradiograms are compared to duplicate plates of colonies or plaques; each exposed spot corresponds to a positive colony or plaque. The colonies or plaques are selected, expanded and the DNA is isolated from the colonies for further analysis and sequencing.

The ESTs can additionally be used to screen Northern blots of mRNA obtained from various tissues or cell cultures, including the tissue of origin of the EST clone. Northern analysis will most often produce one to several positive bands. The bands can be selected for further study based on the predicted size of the mRNA.

Positive cDNA clones in phage lambda are analyzed to determine the amount of additional sequence they contain using PCR with one primer from the EST and the other primer from the vector. Clones with a larger vector-insert PCR product than the original EST clone are analyzed by restriction digestion and DNA sequencing to determine whether they contain an insert of the same size or similar as the mRNA size on a Northern blot.

Once one or more overlapping cDNA clones are identified, the complete sequence of the clones can be determined. The preferred method is to use exonuclease III digestion (McCombie, W.R., Kirkness, E., Fleming, J.T., Kerlavage, A.R., Iovannisci, D.M., and Martin-Gallardo, R., *Methods*: 3: 33-40, 1991). A series of deletion clones is generated, each of which is sequenced. The resulting overlapping sequences are assembled into a single contiguous sequence of high redundancy (usually three to five overlapping sequences at each nucleotide position), resulting in a highly accurate final sequence.

A similar screening and clone selection approach can be applied to obtaining cosmid or lambda clones from a genomic DNA library that contains the complete gene from which the EST was derived (Kirkness, E.F., Kusiak, J.W., Menninger, J.,

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4. Identify colonies containing clones related to the probe cDNA and purify them by known purification methods.

5. Nucleotide sequence the ends of the newly purified clones to identify full length sequences.

5 6. Perform complete sequencing of full length clones by Exonuclease III digestion or primer walking. Northern blots of the mRNA from various tissues using at least part of the EST clone as a probe can optionally be performed to check the size of the mRNA against that of the purported full
10 length cDNA.

An EST is a specific tag for a messenger RNA molecule. The complete sequence of that messenger RNA, in the form of cDNA, can be determined using the EST as a probe to identify a cDNA clone corresponding to a full-length transcript,
15 followed by sequencing of that clone. The EST or the full-length cDNA clone can also be used as a probe to identify a genomic clone or clones that contain the complete gene including regulatory and promoter regions, exons, and introns.

20 ESTs are used as probes to identify the cDNA clones from which an EST was derived. ESTs, or portions thereof, can be nick-translated or end-labelled with P³² using polynucleotide kinase using labelling methods known to those with skill in the art (**Basic Methods in Molecular Biology**, L.G. Davis, M.D. Dibner, and J.F. Battey, ed., Elsevier Press, NY, 1986). The
25 lambda library can be directly screened with the labelled ESTs of interest or the library can be converted en masse to pBluescript (Stratagene, La Jolla, California) to facilitate bacterial colony screening. Both methods are well known in the art. Briefly, filters with bacterial colonies containing
30 the library in pBluescript or bacterial lawns containing lambda plaques are denatured and the DNA is fixed to the filters. The filters are hybridized with the labelled probe using hybridization conditions described by Davis et al. The
35 ESTs, cloned into lambda or pBluescript, can be used as positive controls to assess background binding and to adjust

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of the EST sequence permits routine isolation and sequencing of the complete coding sequence of the corresponding gene. The complete coding sequence is present in a full-length cDNA clone as well as in the gene carried on genomic clones.

5 Therefore, each EST "corresponds" to a cDNA (from which the EST was derived), a complete genomic gene sequence, a polypeptide coding region (which can be obtained either from the cDNA or genomic DNA), and a polypeptide or amino acid sequence encoded by that region.

10 The first step in determining where an EST is located in the cDNA is to analyze the EST for the presence of coding sequence, e.g., as described in Example 14. The CRM program predicts the extent and orientation of the coding region of a sequence. Based on this information, one can infer the

15 presence of start or stop codons within a sequence and whether the sequence is completely coding or completely non-coding. If start or stop codons are present, then the EST can cover both part of the 5'-untranslated or 3'-untranslated part of the mRNA (respectively) as well as part of the coding

20 sequence. If no coding sequence is present, it is likely that the EST is derived from the 3'-untranslated sequence due to its longer length and the fact that most cDNA library construction methods are biased toward the 3' end of the mRNA.

25 One general procedure for obtaining complete sequences from ESTs is as follows:

1. Purify selected human DNA from an EST clone (the cDNA clone that was sequenced to give the EST), e.g., by endonuclease digestion using ECOR1, gel electrophoresis, and

30 isolation of the aforementioned clone by removal from low-melting agarose gel.

2. Radiolabel the isolated insert DNA, e.g., with ³²P labels, preferably by nick translation or random primer labeling.

35 3. Use the labeled EST insert as a probe to screen a lambda phage cDNA library or a plasmid cDNA library.

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sequences (see Examples that follow). Precisely because they do not contain coding regions and are therefore more unique in their sequence structures, those sequences which meet neither of the preceding criteria can be most useful and are generally preferred for mapping.

Consistent with the NIH mission and its responsibilities to disseminate knowledge and share the tangible fruits of its research, the present inventors have taken a number of steps to facilitate sequence data and clone availability. All EST sequences have been submitted to GenBank (representing an addition equivalent to 7% of the human nucleotides in Release 69 of GenBank, September 1991). The corresponding cDNA clones have been submitted to the American Type Culture Collection and information on clones and sequences has been submitted to the Genome Data Base (Pearson, P. Nucl. Acids Res. 19 (Suppl.): 2237-9 (1991)).

II. Complete Coding Sequences from ESTs

The ESTs of the present invention generally represent relatively small coding regions or untranslated regions of human genes. Although most of these sequences do not code for a complete gene product, the ESTs of the present invention are highly specific markers for the corresponding complete coding regions. The ESTs are of sufficient length that they will hybridize, under stringent conditions, only with DNA for that gene to which they correspond. Suitably stringent conditions comprise conditions, for example, where at least 95%, preferably at least 97% or 98% identity (base pairing), is required for hybridization. This property permits use of the EST to isolate the entire coding region and even the entire sequence. Therefore, only routine laboratory work is necessary to parlay the unique EST sequence into the corresponding unique complete gene sequence.

Thus, each of the ESTs of the present invention "corresponds" to a particular unique human gene. Knowledge

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desired tissue are preferably preprocessed by conventional techniques to reduce repeated sequencing of high and intermediate abundance clones and to maximize the chances of finding rare messages from specific cell populations. Preferably, preprocessing includes the use of defined composition prescreening probes, e.g., cDNA corresponding to mitochondria, abundant sequences, ribosomes, actins, myelin basic polypeptides, or any other known high abundance peptide; these prescreening probes used for preprocessing are generally derived from known ESTs. Other useful preprocessing techniques include subtraction, which preferentially reduces the population of certain sequences in the library (e.g., see A. Swaroop et al., Nucl. Acids R s. 19, 1954 (1991)), and normalization, which results in all sequences being represented in approximately equal proportions in the library (Patanjali et al, Proc. Natl. Acad. Sci. USA 88:1943 (1991)).

The cDNA libraries used in the present method will ideally use directional cloning methods so that either the 5' end of the cDNA (likely to contain coding sequence) or the 3' end (likely to be a non-coding sequence) can be selectively obtained."

Libraries of cDNA can also be generated from recombinant expression of genomic DNA. After they are amplified, ESTs can be obtained and sequenced, e.g., as illustrated in Example 11.

The sequences of the present invention include the specific sequences set forth in the Sequence Listing and designated SEQ ID NO: 1 - SEQ ID NO: 2412. In one aspect of this embodiment, the invention relates to those sequences of SEQ ID NOS: 1 - 2412 that comprise the cDNA coding sequences for polypeptides having less than 95% identity with known amino acid sequences (see Table 2) and more preferably less than 90% or 85% identity. In a second aspect, the invention relates to those sequences of SEQ ID NOS: 1 - 2412 that encode polypeptides having no similarity to known amino acid

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long enough to design PCR primers from each end of the sequence to amplify the complete EST. Sequences shorter than 150 bp are difficult to purify and use following PCR amplification. Furthermore, a 150 bp polynucleotide is likely to give a very strong signal with low background in a screen of a genomic library.

Finally, it is highly unlikely that a sequence of the same 150 bp exists in any genes in the genome besides the one tagged by the EST. Some closely related gene family members have very similar nucleotide sequences, but no examples of pairs of human genes with long segments of identical sequence have been reported to date. For instance, there are three known β -tubulin genes in humans. Several ESTs were found that matched one or another of these tubulin genes, but several new members of this gene family were also found and could be clearly distinguished from the three known members. ESTs that match perfectly to several different genes can be detected by hybridizing to chromosomes: if many chromosomal loci are observed, the sequence (or a close variant) is present in more than one gene. This problem can be circumvented by using the 3'-untranslated part of the cDNA alone as a probe for the chromosomal location or for the full-length cDNA or gene. The 3'-untranslated region is more likely to be unique within gene families, since there is no evolutionary pressure to conserve a coding function of this region of the mRNA.

As demonstrated in the Examples that follow, ESTs can be used to map the expressed sequence to a particular chromosome. In addition, ESTs can be expanded to provide the full coding regions, as detailed below. In this manner, previously unknown genes can be identified.

While a variety of cDNA libraries can be used to obtain ESTs, human brain cDNA libraries are exemplified and represent a preferred embodiment. Suitable cDNA libraries can be freshly prepared or obtained commercially, e.g., as shown in Examples 1, 2, and 11. The cDNA libraries from the

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the protein-coding exons of the human gene of interest. Exon trapping shows considerable promise as a general technique for identifying those genes in the human genome that cannot be found by cDNA cloning and EST sequencing. Exon amplification will also be useful for identifying the genes in regions of genomic DNA to which disease genes have been mapped. The exon amplification method can be used directly with the cosmid and YAC clones from human chromosomes that are being obtained by both NIH and DOE supported human genome centers. ESTs comprise DNA sequences corresponding to a portion of nuclear encoded messenger RNA. An EST is of sufficient length to permit: (1) amplification of the specific sequence from a cDNA library, e.g., by polymerase chain reaction (PCR); (2) use of a synthetic polynucleotide corresponding to a partial or complete sequence of the EST as a hybridization probe of a cDNA library, generally having 30 - 50 base pairs; or (3) unique designation of the pure cDNA clone from which the EST was derived (the EST clone) for use as a hybridization probe of a cDNA library. Preferably, EST-derived primer pairs and sequences amplify or detectably hybridize to a sequence from a genomic library.

It has been found that sufficient information is contained in the 150-400 base ESTs from one sequencing run to effect preliminary identification and exact chromosome mapping. Accordingly, the ESTs disclosed herein are generally at least 150 base pairs in length. The length of an EST is determined by the quality of sequencing data and the length of the cloned cDNA. Raw data from the automated sequencers is edited to remove low quality sequence at the end of the sequencing run. High quality sequences (usually a result of sequencing templates without excessive salt contamination) generally give about 400 bp of reliable sequence data; other sequences give fewer bases of reliable data. A 150 bp EST is long enough to be translated into a 50 amino acid peptide sequence. This length is sufficient to observe similarities when they exist in a database search. Furthermore, 150 bp is

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examples are provided to demonstrate and exemplify numerous aspects of the invention.

I. ESTs from cDNA Libraries

5 The sequences of the present invention were isolated from commercially available and custom made cDNA libraries using a rapid screening and sequencing technique. In general, the method comprises applying conventional automated DNA sequencing technology to screening clones, advantageously
10 randomly selected clones, from a cDNA library. Preferably, the library is initially "enriched" through removal of ribosomal sequences and other common sequences prior to clone selection. According to the present method, ESTs are generated from partial DNA sequencing of the selected clones.
15 The ESTs of the present invention were generated using low redundancy of sequencing, typically a single sequencing reaction. While single sequencing reactions may have an accuracy as low as 97%, this nevertheless provides sufficient fidelity for identification of the sequence and design of PCR
20 primers.

 Most human genes can be identified by EST sequencing from libraries of cDNA copies of messenger RNAs. However, some genes are expressed only at specific times during embryonic development, or only in small amounts in a few
25 specific cell types. Other genes have mRNAs that are degraded very quickly by the cell in which they are expressed. If any of these are the case, transcripts of the gene will not be represented in cDNA libraries so the gene will not be identifiable by EST sequencing. A new method
30 called "exon amplification", however, can be used to isolate and identify transcripts of such genes.

 Exon amplification works by artificially expressing part or all of a gene that is contained in a cloned fragment of genomic DNA such as a cosmid or yeast artificial chromosome
35 (YAC). The gene is cloned into a special vector, designed at MIT, that uses control elements from virus genes to express

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mapping locations of expressed genes on chromosomes, for individual or forensic identification, for mapping locations of disease-associated genes, for identification of tissue type, and for preparation of antisense sequences, probes, and constructs is discussed in detail below. Unlike the random genomic DNA sequence tagged sites (STSs) (Olson et al., **Science** 245:1434 (1989)), ESTs point directly to expressed genes.

Various aspects of the present invention thus include the individual ESTs, corresponding partial and complete cDNA, genomic DNA, mRNA, antisense strands, triple helix probes, PCR primers, coding regions, and constructs. Also, where one skilled in the art is enabled by this specification to prepare expression vectors and polypeptide expression products, they are also within the scope of the present invention, along with antibodies, especially monoclonal antibodies, to such expression products.

BRIEF DESCRIPTION OF THE DRAWING

The single drawing Figure schematically illustrates the progression from chromosome to gene to mRNA to cDNA.

DETAILED DESCRIPTION OF THE INVENTION

The detailed description that follows provides not only the actual sequence of each new EST, but also explains how the ESTs were obtained, how to obtain the corresponding complete cDNA sequence and the corresponding genomic DNA sequence, how to make DNA constructs from the ESTs and corresponding sequences, how to use those sequences as reagents in molecular biology and other fields, how to produce gene products from the ESTs and corresponding sequences and antibodies to those gene products, and the functional categories of many ESTs and corresponding genes. Furthermore, numerous actual working examples and predictive

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regions and coding regions of chromosomes is of significant interest. There is a corresponding need for reagents for identifying and marking coding regions and transcribed regions of chromosomes. Furthermore, such human sequences are valuable for chromosome mapping, human identification, identification of tissue type and origin, forensic identification, and locating disease-associated genes (i.e., genes that are associated with an inherited human disease, whether through mutation, deletion, or faulty gene expression) on the chromosome.

SUMMARY OF THE INVENTION

Contrary to the expectations of the scientific community, cDNA screening and sequencing techniques have now been used to discover a large number of heretofore unknown human genes. Disclosed herein are over 2,400 new human polynucleotide sequences. These sequences could represent up to 5% of all human genes. The novelty of these sequences has been established through comparison to both nucleotide sequence databases and amino acid sequence databases. Surprisingly, over 80% of the sequences generated were unrelated to any sequences previously described in the literature.

The sequences of the present invention were ascertained using a fast approach to cDNA characterization. This approach could facilitate the tagging of most expressed human genes within a few years at a fraction of the cost of complete genomic sequencing, provide new genetic markers, provide new DNA-based therapeutics and diagnostics, and provide other valuable nucleotide reagents.

The sequences disclosed herein, styled Expressed Sequence Tags ("ESTs"), are markers for human genes actually transcribed *in vivo*. Techniques are disclosed for using these ESTs to obtain the full coding region of the corresponding gene. The use of ESTs, complete coding sequences, or fragments thereof for marking chromosomes, for

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corresponding to structural and regulatory polypeptides or peptides. See, for example, Putney, et al., *Nature* 302:718-721 (1983). Putney, et al. sequenced over 150 clones from a rabbit muscle cDNA library and identified clones for 13 of the 19 known muscle polypeptides, including one new isotype but no unknown coding sequences.

Another perceived drawback of cDNA sequencing was that some mRNAs are abundant, and some are rare. The cellular quantities of mRNA from various genes can vary by several orders of magnitude. This led critics to believe that most information obtained from cDNA sequencing would be repetitious and useless.

The present invention demonstrates that, despite such skepticism, cDNA sequencing now provides a rapid method for obtaining enormous amounts of valuable genetic information and DNA products of great utility for the biotechnology and pharmaceutical industries. Not only can many distinct cDNAs be isolated and sequenced, even partial cDNAs can be used, with conventional, well-understood methods, to isolate entire genes, and to determine the chromosomal locations and biological functions of these genes. As is demonstrated here, fragments of only a few hundred bases are sufficient, in many cases, to identify the probable function of a new human gene if it is similar in structure to a gene from another animal, or from plants or bacteria. Similarly, even fragments of untranslated regions of a cDNA can be used to: i) isolate the coding sequence of the cDNA; ii) isolate the complete gene; iii) determine the position of the gene on a human chromosome, and hence the potential of the gene to cause a human genetic disease; and iv) determine the function of the gene by means of experiments in which the function of the native gene is disrupted by the addition of a short DNA fragment to the cell, e.g., using triple helix or antisense probes.

Because coding regions comprise such a small portion of the human genome, identification and mapping of transcribed

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human genes would remain unknown for at least the next decade. The present invention can greatly accelerate the pace at which human genes can be identified and mapped. Most gene researchers, in conjunction with publication of their results in this field, submit sequence data to the GenBank database. Prior to the present invention, GenBank listed the sequences of only a few thousand human genes and less than two hundred human brain mRNAs (GenBank Release 66.0, December, 1990).

The role of sequencing complementary DNA (cDNA), reverse transcribed from mRNA, as a part of the human genome project has been vigorously debated since the idea of determining the complete nucleotide sequence of humans first surfaced. The coding sequence of all human genes represents most of the information content of the genome, but only 3-5% of the total DNA. In contrast, cDNA (which is only made from the transcription product of active genes) is one-half to three-fourths (the remainder being 5'- and 3'-untranslated sequence) meaningful genetic information. Thus, some have argued that cDNA sequencing should take precedence over genomic sequencing (Brenner, CIBA Found. Symp. 149:6 (1990)). However, until now, such arguments have not been heeded.

Genomic sequencing proponents have argued the difficulty of finding every mRNA expressed in all tissues, cell types, and developmental states, and that much valuable information from intronic and intergenic regions, including control and regulatory sequences, will be missed by cDNA sequencing. (Report of the Committee on Mapping and Sequencing the Human Genome, National Research Council (National Academy Press, Washington, D.C. 1988)). Further, sequencing of transcribed regions of the genome using cDNA libraries has heretofore been considered impractical or unsatisfactory. Libraries of cDNA were believed to be dominated by repetitive elements, mitochondrial genes, ribosomal RNA genes, and other nuclear genes comprising common or housekeeping sequences. It was believed that cDNA libraries would provide few sequences

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The ability of one strand of DNA to attach or hybridize to a complementary strand has already been exploited for several purposes. For example, small pieces of DNA (15 to 25 base pairs long) can be made which will hybridize to longer strands of DNA which have a complementary sequence. These short "primers" can be selected such that they hybridize to a specific, unique location on the longer strand. Once the primers have hybridized to their target on the DNA, the polymerase chain reaction (PCR) can be employed to generate millions of copies of (or amplify) the particular segment of DNA between the locations to which two primers are bound. Briefly, this technique allows amplification of a DNA region situated between two convergent primers, using oligonucleotide primers that hybridize to opposite strands. Primer extension proceeds inward across the region between the two primers, and the product of DNA synthesis of one primer serves as a template for the other primer. Repeated cycles of DNA denaturation, annealing of primers, and extension result in an exponential increase in the number of copies of the region bounded by the primers.

Similarly, a labeled segment of single-stranded DNA can be hybridized to a longer DNA sequence, such as a chromosome, to mark a specific location on the longer sequence. Segments of DNA 50 bases long or longer that hybridize to a unique DNA location in the human genome are extremely unlikely to hybridize elsewhere in the human genome.

The Human Genome Project is an effort to sequence all human DNA (the human genome). The human genome is estimated to comprise 50,000 - 100,000 genes, up to 30,000 of which might be expressed in the brain (Sutcliffe, *Ann. Rev. Neurosci.* 11:157 (1988)). Once dedicated human chromosome sequencing begins in three to five years, it was expected that 12-15 years will be required to complete the sequence of the genome (Report of the Ad Hoc Program Advisory Committee on Complex Genomes, Reston, Va., Feb. 1988, D. Baltimore Ed. (NIH, Bethesda, Md, 1988)). At that rate, the majority of

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respectively. This nomenclature reflects the orientation of the nucleotide constituents of the mRNA.

5 A cDNA is a DNA copy of a messenger RNA, which contains all of the exons of a gene. The cDNA can be thought of as having three parts: an untranslated 5' leader, an uninterrupted polypeptide-coding sequence, and a 3' untranslated region. The untranslated leader and trailing sequences are important for initiation of translation, mRNA stability, and other functions. The untranslated leader and trailing sequences are called 5'- and 3'-untranslated sequences, respectively. The 3' untranslated sequence is usually longer than the 5' untranslated leader, and can be longer than the polypeptide-coding sequence. The untranslated regions typically have many, randomly-distributed stop codons, and do not display the nonrandom base arrangements found in coding sequences. The 5'-untranslated sequence is relatively short, generally between 20 and 200 bases. The 3'-untranslated sequence is often many times longer, up to several thousand bases.

20 The translated or coding sequence begins with a translational start codon (AUG or GUG) and ends with a translational stop codon (UAA, UGA, or UAG). Generally, translation begins at the first "start" codon on the mRNA and proceeds to the first "stop" codon. Coding sequences can be distinguished by their nonrandom distribution of bases; numerous computer algorithms have been developed to distinguish coding from noncoding regions in this way.

30 Human DNA differs from person to person. No two persons (except perhaps identical twins) have identical DNA. While the differences, called allelic variations or polymorphisms, are slight on a molecular level, they account for most of the physical and other observable differences between individuals. It has been estimated that approximately 14 million sequence polymorphism differences exist between individuals.

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enzyme called reverse transcriptase. The resulting is called complementary DNA, or cDNA. This is schematically shown in the single Figure. When substantially all of the mRNA from one cell or tissue is converted to cDNA at once and cloned into multiple copies of a recombinant vector to allow replication and manipulation in the laboratory, the result is called a cDNA library.

The various types of genes include those which code for polypeptides, those which are transcribed into RNA but are not translated into polypeptides, and those whose functional significance does not demand that they be transcribed at all. Most genes are found on large molecules of DNA located in chromosomes. Double stranded cDNA carries all the information of a gene. Each base of the first strand is joined to a complementary base (hybridized) in the second strand. The linear DNA molecules in chromosomes have thousands of genes distributed along their length. Chromosomes include both coding regions (coding for polypeptides) and noncoding regions; the coding regions represent only about three percent of the total chromosome sequence.

An individual gene has regulatory regions that include a promoter which directs expression of the gene, a coding region which can code for a polypeptide, and a termination signal. The regulatory DNA sequence is usually a noncoding region that determines if, where, when, and at what level a particular gene is expressed.

The coding regions of many genes are discontinuous, with coding sequences (exons) alternating with noncoding regions (introns). The final mRNA copy of the gene does not include these introns (which can be much longer than the coding region itself), although it does contain certain untranslated regions that usually do not code for the polynucleotide gene product. Untranslated sequences at the beginning and end of the mRNA are known as 5'- and 3'-untranslated regions,

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in the literature. See, for example, "Glossary of Genetics, Classical and Molecular" by R. Rieger, A. Michaelis, and M.M. Green (Fifth Edition, Springer-Verlag, New York (1991)). The contents of this and other publications cited in the
5 specification are incorporated by reference herein.

At an initial level, the present invention is based on identification and characterization of gene segments. Genes are the basic units of inheritance. Each gene is a string of connected bases called nucleotides. Most genes are formed of
10 deoxyribonucleic acid, DNA. (Some viruses contain genes of ribonucleic acid, RNA.) The genetic information resides in the particular sequence in which the bases are arranged. A short sequence of nucleotides is often called a polynucleotide or an oligonucleotide.

Like genes, polypeptides are built from long strings of individual units. These units are amino acids. The nucleotide sequence of a gene tells the cell the sequence in which to arrange the amino acids to make the polypeptide encoded by that gene. In general, chains of up to about 200
20 amino acids are called polypeptides, while proteins are larger molecules made up of polypeptide subunits; both types of molecules are referred to generally herein as polypeptides. A triplet of nucleotides (codon) in DNA codes for each amino acid or signals the beginning or end of the message (anticodon). The term codon is also used for the
25 corresponding (and complementary) sequences of three nucleotides in the mRNA into which the original DNA sequence is transcribed.

Generally, enzymes in the cell transcribe the permanent
30 DNA of the gene into a temporary RNA copy, called messenger RNA or mRNA. The mRNA, in turn, can be translated into a polypeptide by the cell. This entire process is called gene expression, and the polypeptide is the gene product encoded by the gene.

35 Scientists have previously discovered how to reverse the transcription process and copy mRNA back into DNA using an

**SEQUENCES CHARACTERISTIC OF HUMAN GENE TRANSCRIPTION
PRODUCT**

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Technical Field

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The present invention relates to newly identified polynucleotide sequences corresponding to transcription products of human genes, and to complete gene sequences associated therewith.

Background

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This invention relates to human genes. Identification and sequencing of human genes is a major goal of modern scientific research. The sequence of human genes is more than just a scientific curiosity. For example, by identifying genes and determining their sequences, scientists have been able to make large quantities of valuable human "gene products." These include human insulin, interferon, Factor VIII, tumor necrosis factor, human growth hormone, tissue plasminogen activator, and numerous other compounds. Additionally, knowledge of gene sequences can provide the key to treatment or cure of genetic diseases (such as muscular dystrophy and cystic fibrosis). The present invention represents a quantum leap forward in mankind's knowledge of human gene sequences.

30

There are several basic concepts of molecular biology which figure prominently in the invention. A brief explanation of those concepts follows. Additional background information and definitions for scientific terms can be found

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(54) Title: SEQUENCES CHARACTERISTIC OF HUMAN GENE TRANSCRIPTION PRODUCT (57) Abstract Partial and complete human cDNA and genomic sequences corresponding to particular expressed sequence tags (ESTs). The ESTs are cDNA sequences that are generally between 150 and 500 base pairs in length, are derived from human brain cDNA libraries, correspond to genes transcribed in human brain, and have base sequences identified herein as SEQ ID NOS: 1-2421.		